

The Royal Institute of International Affairs is an unofficial and non-political body, founded in 1920 to encourage and facilitate the scientific study of international questions.

The Institute, as such, is precluded by its rules from expressing an opinion on any aspect of international affairs; opinions expressed in this book are, therefore, purely individual.

EASTERN
INDUSTRIALIZATION
AND ITS EFFECT ON
THE WEST

'It is yet to be seen how much we can do with this our "Greatness in small things". Human fingers are still the very best machines that mankind do possess, and if the 400,000,000 dexterous fingers of the Japanese are made to be fully employed, we know not what prodigious revolutions they will make in industrial circles. The time may come when we beat the world with the tips of our fingers.'

YOITHI MAYEDA

EASTERN INDUSTRIALIZATION AND ITS EFFECT ON THE WEST

With special reference to
GREAT BRITAIN and JAPAN

By
G. E. HUBBARD

assisted by
DENZIL BARING

With a conclusion by
PROFESSOR T. E. GREGORY

OXFORD UNIVERSITY PRESS
LONDON : HUMPHREY MILFORD

*Issued under the auspices of the Royal Institute
of International Affairs*

1935

OXFORD
UNIVERSITY PRESS
AMEN HOUSE, E.C. 4
London Edinburgh Glasgow
New York Toronto Melbourne
Capetown Bombay Calcutta
Madras Shanghai
HUMPHREY MILFORD
PUBLISHER TO THE
UNIVERSITY

PRINTED IN GREAT BRITAIN

FOREWORD

THIS book owes its origin to an inquiry by the Institute of Pacific Relations—for which the Royal Institute of International Affairs acts as the British Council—into the international aims and results, in the Pacific, of the social, economic, and political policies of the countries most intimately connected with that area—a topic which is to be one of the principal subjects for discussion at the Institute of Pacific Relations Conference which will be held in 1936.

In selecting the study of Eastern Industrialization as the principal contribution to be made from the United Kingdom towards this inquiry, the Council of the Royal Institute was influenced by the interest felt by Great Britain in this subject; and it was agreed that it would also be valuable, both for the purposes of the Conference and for the general information of those interested in the question, to include in the survey some estimate of the economic effects of this industrialization in Great Britain.

The work of compilation was entrusted by the Council of Chatham House to Mr. G. E. Hubbard, a member of the Royal Institute who has had considerable personal experience of the Far East. The thanks of the Council are due to Mr. Hubbard for the many months of labour which he has expended on this work and to Mr. Denzil Baring, also an Institute member, who has assisted him throughout. Expert collaboration has been obtained from various quarters, and substantial contributions—amounting in some cases to the virtual authorship of particular sections—were given by the following:

Mr. Oliver Lawrence, formerly Economic Assistant to the Information Department of Chatham House (in the chapter on World Markets).

Professor G. C. Allen, of Liverpool University (in the chapter on Japan).

Mrs. Vera Anstey, of the London School of Economics* (in the chapter on India).

Mr. S. R. Dennison, of Trinity College, Cambridge (in the chapter on Great Britain).

The final chapter, as indicated on the title-page, is from the pen of Professor T. E. Gregory.

With Mr. Hubbard and with these individual contributors lies the responsibility for any opinions expressed in the study, since Chatham House is precluded by its Royal Charter from expressing an opinion on any aspect of international relations.

Further valuable assistance, mostly in the form of constructive criticism, was received from members of Chatham House, from members of the Institutes of International Affairs in the various countries of the Commonwealth, and from others too numerous to mention by name. Individual acknowledgement must, however, be made of the substantial help obtained from Sir George Sansom, H.M. Commercial Counsellor in Japan; Sir Atul Chatterjee, member of the Council of India; Mr. J. Jewkes, Manchester University; Mr. R. W. Lacey, of the Joint Committee of Cotton Trade Organizations; Mr. Bernard Ellinger; Miss Freda Utley, and Mrs. N. M. Windett.

To these and many other advisers, including the International Labour Office, Geneva, and a number of business firms with special knowledge of the countries dealt with in the book, is largely due such success as may have been obtained in avoiding serious errors of fact or of emphasis.

The study was greatly facilitated by the abundant data accumulated during the last eight years by the Institute of Pacific Relations itself and by its component national units. Most valuable material was available both in numerous monographs on economic and social questions relating to the countries of the Pacific and in the Institute's major publications, particularly the series of past Conference records, printed under the title of *Problems of the Pacific*, and the *Economic Handbook of the Pacific Area* issued last year.

ASTOR

*Vice-Chairman of the Council of the
Royal Institute of International Affairs.*

CHATHAM HOUSE,

ST. JAMES'S SQUARE, S.W. I.

August, 1935.

CONTENTS

SYNOPSIS	ix
INTRODUCTION	xix
I. COMPETITION IN WORLD MARKETS	i
II. JAPAN	45
§ 1. BRIEF HISTORY OF JAPANESE INDUSTRIALIZATION	45
§ 2. PRESENT CONDITIONS: (a) National policy in its effects upon industrial development; (b) Distinctive features of industrial organization, finance, and labour; (c) Population, raw materials, and food-supplies	64
§ 3. JAPAN'S INDUSTRIAL FUTURE	152
III. CHINA	181
§ 1. BRIEF HISTORY OF CHINESE INDUSTRIALIZATION	181
§ 2. GOVERNMENT POLICY TOWARDS INDUSTRY: (a) National Industrial Policy; (b) General characteristics of labour and industry; (c) Chinese and foreign-owned factories	198
§ 3. CHINA'S INDUSTRIAL FUTURE	228
IV. INDIA	240
§ 1. BRIEF HISTORY OF INDIAN INDUSTRIALIZATION	240
§ 2. PRESENT CONDITIONS: (a) The organization and finance of large-scale industries and the role of foreign capital; (b) The industrial policy of the Government; (c) The cotton mill, and iron and steel industries; (d) Characteristics and problems of industrial labour	252
§ 3. INDIA'S INDUSTRIAL FUTURE: (a) India's competitive position and industrial potentialities; (b) Political factors affecting India's industrial future	292
V. GREAT BRITAIN	307
§ 1. HISTORICAL NOTE ON BRITISH INDUSTRIAL DEVELOPMENT IN THE NINETEENTH CENTURY	307
§ 2. POST-WAR CONDITIONS IN THE EXPORTING INDUSTRIES	313
§ 3. REACTIONS ON THE SOCIAL STRUCTURE: UNEMPLOYMENT AND THE 'DISTRESSED AREAS'	334

VI. THE EFFECTS OF EASTERN INDUSTRIALIZATION UPON TRADE RELATIONSHIPS IN THE BRITISH COMMONWEALTH	346
CONCLUSIONS: an economist's comment, by T. E. Gregory .	363
BIBLIOGRAPHY	372
INDEX	379

SYNOPSIS

I. COMPETITION IN WORLD MARKETS

Japan the centre of attention in regard to trade competition—competition from Japan not a novel feature of international trade, and its intensification due to qualitative rather than quantitative changes—analysis of these changes; transition to ‘finished’ exports, increase in range of goods exported, expansion to new markets—changes have developed from natural, not artificial causes—no deliberate policy of selling below costs—extent of changes in direction of trade; rapid expansion in newer markets.

NETHERLANDS EAST INDIES: Development of Japanese trade; quota restrictions.

CHINA: Japanese progress in China market for cotton goods at expense of Western countries—decline in importance of cotton trade and change in Chinese imports reduces Japan’s advantage—Japan’s present share in Chinese imports—position in regard to machinery imports, &c.—improved outlook for Western imports in event of Chinese recovery.

BRITISH INDIA: Progress of Japanese trade—Indo-Japanese negotiations for trade on a barter basis.

EGYPT: Growth of Japan’s reciprocal trade with Egypt—Japanese competition with Egyptian industries in Asia Minor markets—Japan’s trading position with Egypt analogous to that with India.

THE BRITISH EMPIRE: Japanese competition most severe in colonial territories—development trend in the case of the Dominions—Japanese imports into British colonies not entirely competitive, new levels of demand tapped by Japanese goods—situation in colonial markets illustrated by samples; position in West Africa, East Africa, Ceylon, British Malaya, Tanganyika, and Palestine; effects of low prices of Japanese imports; threat to Lancashire’s exports of better quality cottons from low quality rayon goods from Japan; Japanese exports of rayon.

COLONIAL MARKETS OF OTHER WESTERN POWERS: French Morocco; French West Africa.

OTHER WORLD MARKETS: The Balkans; the Near East; South and Central America—reciprocal basis of Japanese trade with these countries.

TABLE	I. Japanese exports of manufactured articles.
„	II. Japanese exports (divided into countries).
„	III. Monthly average exports of cotton piece-goods. (From Japan and the United Kingdom.)
„	IV. Imports into the Netherlands East Indies by countries of origin.
„	V. Imports into the Netherlands East Indies of cotton tissues by countries of origin.
„	VI. Imports into the Netherlands East Indies of rayon tissues by countries of origin.

TABLE	VII.	Miscellaneous imports into the Netherlands East Indies from Japan.
"	VIII.	Principal imports into China in 1934.
"	IX.	Japanese competition in British India. (Indian Imports.)
"	X.	Japanese exports to Great Britain.
"	XI.	Japanese exports to Australia.
"	XII.	Imports of cotton and rayon textiles into Nigeria in 1934.
"	XIII.	Imports of rayon piece-goods into Jamaica during 1934.
"	XIV.	Imports of British and Japanese cotton textiles into the British Colonial Empire.
"	XV.	Imports and average import values of cotton piece-goods into Tanganyika.
"	XVI.	Imports and average import values of cotton piece-goods into Palestine.
"	XVII.	Piece-goods exports of cotton and rayon.
"	XVIII.	Japanese rayon piece-goods exports by destination.
"	XIX.	Exports of cotton tissues to South America by Japan, Great Britain, and the U.S.A.
"	XX.	Japanese exports to South America.

II. JAPAN

§ 1. BRIEF HISTORY OF JAPANESE INDUSTRIALIZATION

Japanese industry and foreign trade during the feudal epoch—impact of Western commercial enterprise and Japan's first steps in modern industrialization—the Government the author of all major enterprises—the effects of the Sino-Japanese War in stimulating industry—the transfer of individual enterprises from Government to private hands—composition of Japanese trade at the end of the nineteenth century—boom resulting from the Russo-Japanese War—influx of foreign capital—predominant importance of textile industry—the silk industry—the cotton industry; development of (a) spinning, (b) weaving—general industrial development prior to the Great War—effects of the Great War on Japanese industry and trade and the expansion of trade markets—Japan passes from a debtor to a creditor nation—expansion of Japan's cotton trade during and after the War—subsequent return to low-quality export markets—reorganization and rationalization of the cotton industry after the world slump—financial crisis of 1927 and resultant readjustment—position of the cotton industry after the crisis—the rayon industry—the heavy industries; iron, steel, and machinery—the development of other industries; wool, porcelain, electrical apparatus, rubber goods—the effect upon Japanese industry of the world depression—production and export during the depression years.

§ 2. PRESENT CONDITIONS

(a) *National Industrial Policy in its effects upon Industrial Development.*

State-planned industry—partnership between State and private enterprise—State interest in the steel industry—transition from Government

ownership to Government directive control; the Government as industrial financier—rapid industrial development during the Great War creates new problems for the State—rationalization movement a fresh field for Government intervention—Bureau of Rationalization of Industry and its operation—Export Guild's Law.

(b) Distinctive Features of Industrial Organization, Finance, and Labour.

1. *Organization.* Japan's specialization in textile manufactures—integrated structure of the leading industries; cartels, trusts, and family groups—centralization of financial control; financial oligarchies—Japan's special advantages in cotton manufacturing; cheapness of labour, contact with Far Eastern markets, lower costs of freight, progress in organization, economies in the purchase of raw cotton—organizational structure; Japan Cotton Spinners' Association and its activities—methods of cotton purchase—technical equipment of Japanese cotton mills and adaptability to the use of coarse grades of raw cotton; tendency to change to higher grades of production—subsidization of the cotton industry—general review of the strong points of Japanese organization—Silk industry; rationalization of sericulture—Rayon industry; special advantages of Japan in rayon manufacture; staple fibre. National spirit in industry.

2. *Finance.* Currency depreciation and its effects; causes of Japan's abandonment of the gold standard in 1931, its influence on the internal price structure—comparison between the degrees of devaluation of the yen, the pound sterling, and the dollar and the reaction on wholesale prices—future exchange policy and the extent of the benefits derived from depreciation of the yen; countervailing rise in cost of raw materials and of rise in domestic prices—course of Japanese price movements after the gold embargo and comparison with movements in other countries—effect on production costs; wages and 'overheads'—cost of living as a factor affecting wages; stability of the cost of living index—fall in 'direct' wages—effect of currency depreciation on overhead expenses.

Criteria of Japan's national financial position—the budgetary situation for the last fifteen years—causes of the growth of public expenditure; military expenditure and agrarian relief—unbalanced condition of the budget since 1930; annual deficits—potential limits of increasing revenue by taxation—Government borrowing for covering annual deficits and its future prospects—the National Debt—low ratio of external to internal debt—Japan's balance of international payments—the internal debt position—can inflation be avoided?

3. *Labour.* Comparative labour costs should be estimated per unit of consumption—Mrs. Orchard's estimate of 1929—increase in labour efficiency since that date—reasons for low efficiency as compared with the West; proportion of female labour, rapid labour turnover—cheapness of labour originally retarded technical improvements in Japan—recent rationalization movement and its effects on labour efficiency—difficulties and complications in comparing labour costs in Japan and the West; variations in factory conditions, the Japanese 'small producer', the importance

of 'indirect' wages—analysis of 'indirect' labour costs—counterbalancing costs in Great Britain, taxes and State insurances charges—calculation of comparative wages per unit of production in the cotton industries of Japan and Lancashire—Japanese wage costs probably less than one-half—comparison of overhead costs—the disparity small between Japan and Lancashire—hours worked in Japanese factories—the peculiar position of the 'small producer' in Japan and his importance in export trade; conditions in small factories—industrial relations in Japan; influence of feudal conceptions—weakness of Trade Unions; its causes.

(c) *Population, Raw Materials, and Food Supplies.*

Japan has no absolute problem of 'over-population', but suffers from agricultural over-population—need for alternative openings for labour—readjustment sought through industry and commerce—absorptive capacity of employment in 'indirect services'—limits of emigration—character of industrial expansion determined by poverty of natural resources, necessitating international trading—hence importance of examining Japan's situation regarding essential raw material supplies present and prospective—silk, cotton, wool, iron ore, coking coal; Manchuria as a source of supply—extent of Japan's self-sufficiency in steel manufacture—Japan's command of other industrial metals; copper, lead, tin, zinc—motive power; petroleum, hydro-electric generation.

Food and Population—Japanese Empire has been relatively self-supporting in food staples hitherto, but the future is problematic—growth of population; estimates of increase—Japan's rice budget—scope for increased rice production in Japan Proper—other foodstuffs; wheat supplies of Japan and her overseas possessions, meat, butter, milk, &c.—potentialities of Korea and Formosa as suppliers of rice—estimates of rice supply and demand during next fifteen years—possibility of Japan's colonies being able to supply the deficiency in home production—conclusion that Japan's obligation to export depends in fact chiefly on lack of industrial raw materials, but fear of food shortage also provides an incentive.

§ 3. JAPAN'S INDUSTRIAL FUTURE

Dependence of Japanese industrial prospects upon international economic and political relations; forecast can only be made on assumption of peace in Far East—monetary problems may determine immediate future—more permanent factors are increase of population and shortage of natural resources, requiring exchange of finished exports for imported necessities of life—conditions favour Japan in regard to import of raw materials, but can she expand her volume of exports?—specialized nature of Japanese export trade in the past; limited range of articles of export and of markets—change to greater diversification since the World Depression—which trend will hold good for the future?—importance of this question for Western exporting nations—reasons for expecting increasing diversification of Japan's export trade; the unfavourable outlook for silk, difficulties in expanding cotton exports in the face of international restrictions and of

increased local manufacture in former Eastern markets—more favourable prospect for developing new types of export; the outlook for various types—conclusions regarding future character of Japanese export trade.

The question of selling costs—conclusions to be drawn from previous section dealing with labour costs—economic and social links between farm and factory workers in Japan; the latter retain their connexion with the land—depressed living conditions of the agricultural class thus reacts on industrial wages—agrarian distress increases surplus of labour—any tendency towards an increased labour demand due to the growth of industries liable to be counterbalanced by increased mechanization of industry—improvements in factory efficiency a further element in reducing manufacturing costs—industrial wage rise might follow if Japanese Government were to force up food prices and so raise the cost of living—an effective agrarian relief policy would therefore be injurious to manufacturers' interests, while inaction may be disastrous for rural population—consideration of social and political forces affecting industry—advantages and drawbacks of Japan's 'immaturity'—and of her rise in population—conflict between national economic welfare and certain vested interests—conflict between economic and political objectives in choice of industries to be nurtured—conflict between rural and industrial interests, and consequent dilemma for the Government—withdrawal of financial support of agriculture would affect the basis of the State; the opposite policy would impede export expansion—choice of policies regarding the overseas empire and Manchuria; the 'economic bloc' versus a system of free trading—problem of competition between 'colonial' and 'home' producers; pig-iron, rice—influence of international environment on Japan's choice of policies; general economic nationalism as an incentive to Japanese imperial expansion with possible adverse effects to her economic welfare.

III. CHINA

§ 1. BRIEF HISTORY OF CHINESE INDUSTRIALIZATION

Traditional type of Chinese industry—early foreign trade—unbalanced nature of the trade owing to China's indifference to foreign products—slow expansion of trade, but rising importance of imported cotton piece-goods—China begins to import cotton yarn first from India and later from Japan—Japan's share in the China trade stimulated by the Russo-Japanese and Great European Wars—post-war trade developments—general expansion till 1929, rapid decline of exports from that date followed by contraction of imports from 1931 onwards—changes in nature of imports—increasingly adverse trade balance for China.

Beginnings of modern industry—the first factories—Chinese industrial enterprise favoured by the Great War—the growth of the cotton industry in China and its effects upon foreign trade—export of cotton goods from China—development of other manufactures (woollens, flour, glass, cigarettes, rubber, and metal manufacturing).

General nature of industrial development in China—its unregulated

character—Chinese attitude to foreign technical instruction—the development of the foreign mills under the Treaty Port system—the status of rural industries in China—summary of foregoing section.

§ 2. PRESENT CONDITIONS

(a) *Political factors and Government policy towards industry.*

Present position regarding central authority in China—extraterritoriality a hindrance to national industrial development—Chinese Government's attitude to industry and the capitalist system—Government factories—protection and subsidy—tariff policy—the National Economic Council and the Cotton Industry Commission—industrial legislation.

(b) *General characteristics of Labour and Industry in China.*

Supply of labour—quality of labour—wages, living costs, and standard of life—labour recruitment—composition of labour, women and child workers—trade unions and strikes—summary of labour conditions—currency instability and price levels—finance and the position of the modern Chinese banks—difficulty in mobilizing capital required for industrial development—inadequacy of transport system—road and railway development—raw material resources (coal, petroleum, iron ore, raw iron, other metals, cotton, wool).

(c) *Chinese and foreign-owned factories.*

Conditions giving rise to foreign factories in China—foreign investment in China and the proportion invested in manufacturing industries—foreign industrial enterprise concentrated on the manufacture of cotton goods—statistics of cotton mills in China—greater financial facilities of foreign-owned enterprises—organization and management of foreign compared with Chinese mills—labour conditions in the two classes of mills—pessimistic Chinese forecasts of the future for Chinese factories.

§ 3. CHINA'S INDUSTRIAL FUTURE

Interdependence of industry and politics in China—résumé of natural assets and handicaps—degree of political stability—retarding cultural factors—foreign co-operation, present position and prospects—need for increase of physical equipment—markets for industrial products; capacity of the 'home' market—types of industry most likely to develop.

Foreign industrial enterprise as a separate problem—outlook for Japanese factory expansion in China: Chinese attitude, Japanese Government's policy—Japan's special position—general conclusions: the three alternative lines of progress.

IV. INDIA

§ 1. BRIEF HISTORY OF INDIAN INDUSTRIALIZATION

Early contacts with the West; similarities and differences between England, China, and Japan—principal nineteenth-century industry and trade and their decline in face of competition from the West—penetration of English goods—*laissez-faire* policy of the Government and passive attitude of

Indians retard large-scale industrial development—contrast with Japan—change in conditions after the turn of the century; effects of Nationalist movement and constructive economic policy—pre-war prosperity—the Great War stimulates Indian industry but lack of machinery and plant limits development and Japan enters the breach—progress of India's foreign trade during the last two decades—dependence on foreign manufactures—the relative importance of agriculture and of small-scale and large-scale industry—relative importance of the major organized industries—the cotton industry from 1880—its war-time boom and post-war depression—production concentrated on home market—concluding analysis of India's position in world trade—imports; decline in cotton, iron, and steel goods, and increased importance of high-class miscellaneous manufactures—exports.

§ 2. PRESENT CONDITIONS

(a) *The Organization and Finance of Large-scale Industries and the Role of Foreign Capital.*

Industries in which foreign capital predominates; cotton mill and steel industries are exceptions—comparison with Japan and China regarding use of foreign capital and degree of accompanying outside control—the Managing Agency system criticized—scarcity of industrial capital; the reasons—European and indigenous credit agencies; methods of providing 'block' and working capital—list of improvements required in industrial and financial organization; defects in localization of industries.

(b) *The Industrial Policy of the Government.*

Government *laissez-faire* policy in nineteenth century—changes under Lord Curzon—fresh changes at period of Great War; Industrial Commission's Report of 1916—Tariff policy and work of Tariff Board—Tariff changes since the War; recent changes connected with Ottawa Conference and with Japanese competition—Ottawa Agreements as affecting India's trade with Great Britain and the Empire—Indo-Japanese negotiations and Trade Convention of 1933—analysis of India's fiscal autonomy.

(c) *The Cotton Mill, and Iron and Steel Industries.*

The cotton industry: (a) spinning; (b) weaving—causes of depression after 1923; Japanese competition—Tariff protection—the Indo-Japanese Cotton Agreement of January 1934—India and Lancashire Mill-Owners' Conference of October 1933 and its results—changed relations with Lancashire and co-operative action between Indian and Lancashire mill-owners.

Iron and steel industry: (a) pig-iron; (b) steel—relation between production and consumption of iron and steel goods—Tariff protection—provenance of iron and steel imports—Ottawa Conference results—Tariff Board report of 1934 and consequent legislation.

(d) *Characteristics and Problems of Industrial Labour.*

Low wage rates and low efficiency in India—labour unemployment—rural recruitment of labour; defects and advantages of the system—

relatively small proportion of women and child workers—working conditions, wages, and standards of life—standards extraordinarily low—comparison with Japan—labour legislation; Royal Commission on Labour and resultant Factory Act—Trade Union movement—workers' efficiency as compared with Lancashire and Japan—industrialization and the population problem.

§ 3. INDIA'S INDUSTRIAL FUTURE

(a) *India's Competitive Position and Industrial Potentialities.*

Factors for and against expansion—India's 'balanced economy'; her increase in self-sufficiency—this need not imply a reduction of her demand for imported manufactures—changes in direction of India's trade—outlook concerning expansion of Indian exports—Indian trade is 'complementary' with the U.K., British Empire, and U.S.A., 'competitive' with Japan, China, and Europe—trade with Great Britain and Japan analysed—international competition chiefly refers to cotton trade at present and iron and steel industry in the future.

(b) *Political Factors affecting India's Industrial Future.*

Dependence upon political developments—probable effect of proposed extension of political franchise and of communal electorates—political parties and party programmes in the economic field—future political relations with Great Britain and British Empire; possibilities in co-operation and discrimination—conclusions.

V. GREAT BRITAIN

§ 1. HISTORICAL NOTE ON BRITISH INDUSTRIAL DEVELOPMENT IN THE NINETEENTH CENTURY

Purpose of the note—causes and effects of Great Britain's priority in modern industrialization and overseas trading—growth of her 'international' system of economy—rise of European competition leading to slackening off of British progress—Great Britain's loss of her early advantages—connexion between foreign investment and foreign trade—changes at turn of century and effects of Great War on British economic structure.

§ 2. POST-WAR CONDITIONS IN THE EXPORTING INDUSTRIES

Great Britain, like Japan, has a vital 'subsistence' problem; her dependence on export trade to maintain the standard of life—world production and trade in the years after the War; problems of new orientation of industries and of international re-adjustment—difficulties increased after 1925 by fall in prime commodity prices—changes in world demand; new types of commodities displacing the older staples; growth of 'secondary' production—Great Britain particularly affected—her peculiar problems also increase; maladjustments due to hypertrophy of certain war-time industries; surplus labour and plant; over-capitalization in the cotton industry especially—position after 1925; fresh difficulties consequent on restoration of

gold standard and world slump in prices—compensating reduction in manufacturing costs impeded by wage rigidity and Trade Union restrictions—‘rationalization’ in theory and in practice; pros and cons of ‘vertical’ amalgamation in the cotton industry; reorganization needed.

The textile industry; detailed examination of its present position—its losses in overseas markets and the causes in each case—finance and labour factors—surplus spindleage, the extent of the problem and the attempt to deal with it by the Lancashire Cotton Corporation—comparison with Japan in regard to co-ordination—scope for improvement by shifting production to higher grades of cotton goods.

Review of other staple industries; the coal industry; its reorganization—the iron and steel industry—ship-building; attempts to deal with excess shipyard capacity; effects of foreign governments’ encouragement of native ship-building—the shipping trade; subsidized foreign competition—the woollen industry; its recent decline—sundry other industries affected by competition.

§ 3. REACTIONS ON THE SOCIAL STRUCTURE: UNEMPLOYMENT AND THE ‘DISTRESSED AREAS’

General picture of unemployment and its distribution among the various industries, grouped as ‘declining’ and ‘expanding’; concentration in the former—increase of employment in ‘expanding’ industries imperfectly cancelled by decrease in ‘declining’; degree of permanent unemployment in latter—unemployment localized in so-called ‘depressed areas’; its incidence in these areas—meaning and extent of ‘surplus’ labour; its causes—labour transference essential as a cure for distressed areas—transfer of workers to new industries in the same area; special position in Lancashire—migration to newer industrial districts in south and east; special difficulties for Lancashire—difficulties and limitations of labour migration in general—residual body of workers without hope of permanent employment—decline in export trade due largely to inescapable factors—relaxation of trade restrictions only a partial solution—relief must be sought in revival of staple industries combined with development of newer exporting industries to suit changed world conditions.

VI. THE EFFECTS OF EASTERN INDUSTRIALIZATION UPON TRADE RELATIONSHIPS IN THE BRITISH COMMONWEALTH

The new nucleus of trade created in the Pacific and its effect on the British Dominions—historical development of British imperial trade relations—basis of British imperial trade—the growth of influences modifying imperial trade relations; disturbances caused by the Great War—the new post-war situation; growing importance of outside markets for the Dominions—effect of the world depression on British imperial trade—importance of Eastern industrial expansion in relation to imperial trade lies chiefly in the future—rising populations in the East are a fundamental factor—the economic link between Australia and Japan—review of the growth of

Australian-Japanese trade; importance of wool—Japan as a substitute market for Australian raw materials—the necessity of balancing Australian exports by purchases from Japan—opinions expressed by the Australian Commission to Japan—Australia's trade with China—New Zealand's trade with Japan—South African trade with Japan—analysis of Canadian trade with Japan; its relatively minor importance and smaller prospects of development—general tendency for Japan to become an increasing centre of trade for the British Dominions—closing of older channels of trade; agrarian protection in Europe, restriction on imports into the United Kingdom, pressure on exporters of primary products to find new markets—principles of the Ottawa Agreements and the limitations to a closed system of trade within the British Commonwealth—the effects of redistribution of trade and the prospects for readjustments.

INTRODUCTION

THE emergence of Eastern countries as large-scale industrial producers, their entrance into international markets, the loss of these markets to the manufacturing countries of the West, and the reaction of the latter in the form of trade restrictions in colonial territories have caused a substantial addition to the world's economic problems of to-day.

To Great Britain, in common with other Western manufacturing countries, Eastern competition has brought regional unemployment, labour transference difficulties, problems of industrial reform, and other economic and social corollaries of a shrinkage of export trade. Japan is faced on the one side with pressure of population, and on the other with obstacles to commercial expansion through the progressive closing of the door to her exports which is taking place in many of the markets of the world. China, urged to industrialization by a widening adverse margin in her international balance of trade, is becoming her own supplier of the classes of goods in which she formerly offered a large market to the West. India—a half-way house—finds herself drawn into conflict with the manufacturing interests both of the East and the West through fostering home industries to relieve the poverty of her masses.)

The more immediate problems relate to the progress of Japan, who, by reducing her costs of production to a level hitherto unknown, has extended her trading operations in every quarter of the globe and invaded and captured markets which, in the past, had been the cherished preserves of the exporting countries of the West.

Coinciding with world economic depression, the growth of Eastern competition has in one trade at least, namely that in cottons, produced results which for the Western countries concerned have been little short of catastrophic. In view of the success of Japan—with India and China

threatening to follow suit—in outdoing the West in the cheap manufacture of cotton goods and not a few other staple articles of trade, it becomes a question of primary importance to know what limits are fixed to the competitive power of Eastern manufactures *vis-à-vis* those of the West. Will there be a redressing of the balance, or has the West to expect an extension of competition resulting in a further displacement of trade? Is the Eastern factory worker destined, in fact, to supplant the Western operative in ever-widening spheres?

In this connexion much has been said and written about the industrial advantage which Eastern countries derive from a low standard of life, resulting in cheap wages. The weighing up of comparative costs of labour, of the effect of low wages upon competitive power and of their real importance as an international factor, together with judgment on the question as to whether present differences of standards are likely to be maintained, present, however, an exceedingly complex task and the determinant facts, if ascertainable at all, can only be reached by a thorough study of conditions in the individual countries. There are, moreover, a number of other factors—economic, social, and political—which count no less than relative labour costs in deciding competitive power and in directing the trend of development in each of the countries concerned. It is the study of all these essential factors affecting industrial progress which constitutes the substantive part of this book.

The method pursued for this purpose is that of analysing in turn the industrial structures of the three Eastern countries whose industrial development is on the largest scale, namely Japan, China, and India, and by attempting to deduce from the facts the lines of their future development. The industrial development of the East having been thus reviewed, its effect on the West is illustrated by an examination of the British export industries affected by competition, and by a general appreciation of the effect on the national economy of Great Britain of the loss of her overseas markets. The results of Japanese industrial expansion

upon 'third party' trade relations, represented by British Commonwealth trade, is the theme of a separate chapter. Finally, conclusions arising out of the study as a whole are presented by Professor Gregory in the concluding chapter of the book.

Primarily, therefore, the subject is dealt with in this work from the competitive angle. This should not be thought to imply the assumption that industrial progress in Japan, India, or China—even premising the continuance of the present low costs of production—must of necessity be to the detriment of Western exporting countries. To equate the two as if the growth of the one involved a proportionate contraction of the other would be an obvious error. To take the instance of Japan, her low-priced manufactures have already, in Africa and elsewhere, opened up new markets which, but for this, might have lain dormant for a very long time to come, offering little or no field to the higher-priced goods of the West. From the profits of such trade Japanese purchasing power must in its turn benefit, thereby stimulating imports both of the raw materials needed by Japanese industries, and also of manufactured goods, both 'capital' and for consumption, of kinds which Japan is not well fitted to produce. Again, Japan is at present regulating her trade with a view to correcting her adverse balance of trade and is concentrating on exports, but if these continue to grow a proportionate increase of imports must occur in the long run, the more so because Japan depends largely on foreign sources for raw materials required for manufacture. The growth of Japanese industry should, then, eventually benefit the trade of the world, though this obviously does not preclude very injurious results for individual countries with whom she stands directly in competition. For a properly balanced view such long-term aspects of Eastern industrialization need, of course, to be kept in mind when the more immediate problems arising from competition are being discussed.

The urgency of these problems has meanwhile already become great, and we have seen diverse attempts being

made to deal with the situation both on the international and the domestic plane. The Indo-Japanese Trade Convention of 1933, the negotiations between Japan and Great Britain during the same year, and the parleys conducted by Japan with the Netherlands East Indies and with Australia are examples of efforts at a solution from the international side, while unilateral action has taken the form of quota and tariff restrictions, Government control of exports, as instituted in Japan, and schemes of industrial reorganization such as have lately been introduced in the Lancashire cotton trade. But the measures hitherto taken have been, at the best, partial. While competition continues—and it appears likely not only to continue but to intensify in certain markets at least—the search for remedies must proceed. Varied suggestions have been made, including the division of markets by international agreement, the regulation of export prices, rationalization of production according to type and quality, and the specialization of industry within individual countries. To judge aright the merits of such proposals and to discover the line of action best calculated to succeed requires knowledge of conditions and trends in the various industrial centres. It is the aim of the present volume to add to this knowledge. Existing sources of material are inadequate to support conclusions of a definite sort. Other researches in the same field are, however, in progress and the study will be further advanced by discussion at the forthcoming Conference of the Institute of Pacific Relations, to which, as already mentioned, the present volume serves as a contribution from a British point of view.

G. E. HUBBARD.

CHAPTER I

COMPETITION IN WORLD MARKETS

WHILE in the long-term study of Eastern Industrialization which occupies the greater part of this book India and China share our attention with Japan, interest concentrates on the last of these three countries when we are dealing with the current state of affairs in regard to trade competition in international markets. The present chapter, therefore, will be mainly confined to an examination, from a Western view-point, of the nature, extent, and geographical extension of Japanese competition in the principal markets of the world where her manufactures compete with those of Great Britain and other countries of the West.

This competition—it is well to emphasize at the start—is no novel feature of international trade peculiar to the last five years of depression. Contrary to the frequently held belief, Japanese exports taken as a whole have gained little in annual value since the War, and the increase in their share of the world's export trade has been a modest one. The peak level of export values was in fact touched as long ago as 1925, and the figure then recorded has never been approached since 1929, while the share of Japanese exports in the world's export trade expressed in gold values has only increased from 2.93 per cent. in 1929 to 3.13 per cent. in 1933. This increase has meanwhile been balanced by a parallel increase in Japan's share of the world's import trade from 2.8 per cent. in 1929 to 3.04 per cent. in 1933:

Japanese Trade

(Values in millions of U.S. (old) gold dollars)

	<i>Imports</i>					<i>Exports</i>				
	1929	1931	1932	1933	1934	1929	1931	1932	1933	1934
Value	995	589	395	380	398	970	547	364	366	378
Per cent. of world total	2.80	2.83	2.82	3.04	3.4*	2.93	2.89	2.82	3.13	3.5*

* Provisional figures.

The intensity with which Japanese competition has threatened the trade of older manufacturing countries owes, in fact, much more to qualitative than quantitative causes. The steady transition from the production of food-stuffs and raw material to the output of finished manufacture for export,¹ the persistent reduction of export prices, the spread of export activity beyond the Pacific area, and the increase in the *relative* volume of exports in a period of universal depression have been more potent sources of anxiety to Japan's industrial competitors than any startling increase of productivity per head of population.

Japan has, moreover, succeeded in maintaining, and even improving, the relationship of her export trade to the volume of domestic production at a time when most other countries have been suffering from the opposite tendency:

1928 = 100

<i>Index of Industrial Production</i>				<i>Index of Exports</i>	
				<i>Volume</i>	<i>Value in Yen</i>
1929	.	.	111.7	95.7	110.0
1930	.	.	105.8	96.5	75.0
1931	.	.	101.0	81.6	58.6
1932	.	.	108.4	91.8	71.4
1933	.	.	129.0	112.7	95.8
1934	.	.	143.0	127.5	112.0

It has also to be remembered that the countries that have suffered most by the expansion of Japan's exports are not, in the main, those which have benefited from an increase of Japan's imports, since her increased imports have been mostly of raw material to the advantage of those countries which are primary producers, while her increased exports have been mainly of manufactures to the detriment of industrial producers.

To illustrate two of the most immediately important of the above-mentioned factors in Japanese competition figures² may be given which show how the quantum of Japanese trade, though reduced by the world depression,

¹ See Table on p. 30.

² From the League of Nations Economic Intelligence Service.

has declined less than that of world trade in general, while at the same time the (gold) prices at which Japan has marketed her exports have been lower than the average for all countries.

	1930	1931	1932	1933	1934
Quantum of World Exports .	100	92.5	79.6	81.2	83.4
Quantum of Japanese Exports	100	103.0	122.0	135.0	159.0
Price Index (gold) of World Exports	100	77.5	60.9	54.0	50.6
Price Index (gold) of Japanese Exports	100	75.0	42.6	38.2	33.2
Value (gold) of World Exports	100	71.4	48.7	43.7	43.0
Value (gold) of Japanese Exports	100	77.4	51.2	51.6	53.1

Too much importance should not be attached to the absolute movements of these indices which have been compiled from the information published annually in the League of Nation's *Review of World Trade*. The trend, however, is unmistakable: the quantum of Japanese exports has been increasing annually during the last five years while the quantum of world trade has been declining (until 1934) and the Japanese export price level has fallen far more heavily than the average price level for world exports. The gold value of Japanese exports has been maintained and slightly increased in the last three years, during which the gold value of world trade as a whole has continued to fall.

To elucidate two other essential factors, namely the change in the character of Japanese exports and the invasion of new markets, let us rapidly glance at the course of developments since the Great War. As will be shown later in this volume, Japan emerged from the War with a greatly increased export trade, mainly as a result of the exclusion of Western supplies from Asiatic countries during the war years. As the pre-war channels of trade were once again reopened, these gains were to a great extent forfeited, but a fresh period of expansion from 1923 to 1925 more than restored Japanese exports to the

position held in 1919. This level was not fully maintained during the next four years; in 1930 and 1931, after the outbreak of world depression, came two years of slump, to be succeeded by a renewed recovery in 1932 and 1933. These movements can be seen from the following figures:

Value of Japanese Exports

(In millions of yen)

1913 . . . 632.5	1928 . . . 1972.0	1932 . . . 1410.0
1919 . . . 2098.9	1929 . . . 2148.6	1933 . . . 1861.0
1921 . . . 1258.8	1930 . . . 1469.9	1934 . . . 2171.9
1925 . . . 2305.6	1931 . . . 1147.0	

But although the total value of Japanese exports during the post-war years reveals no very constant tendency, a very definite change is discernible in the composition and direction of these exports. In a subsequent chapter we shall examine these changes in relation to their influence on the direction of Japan's future industrial development, but some description of them is needed here in order to throw light upon the position which Japan has won for herself in international markets at the present time.

Formerly the staple of the Japanese export trade was raw silk, but in the post-war period exports of semi-manufactures (including raw silk) have fallen continuously in importance and have been replaced by exports of finished manufactures as indicated below:

Percentage Composition of Japanese Exports

	<i>Foodstuffs</i> per cent.	<i>Raw</i> <i>materials</i> per cent.	<i>Semi-manu-</i> <i>factures*</i> per cent.	<i>Finished</i> <i>goods</i> per cent.	<i>Others</i> per cent.
1914	10.8	7.7	51.8	28.4	1.3
1922	10.7	5.2	38.6	43.5	2.0
1928	7.9	4.5	41.8	41.2	4.6
1929	7.4	4.1	41.1	43.6	3.8
1930	8.8	4.4	35.7	47.0	4.1
1931	8.9	3.9	36.9	46.5	3.8
1932	8.1	3.7	35.6	51.3	1.3
1933	8.7	4.0	29.4	56.3	1.6
1934	7.9	4.4	23.0	62.0	1.3

* Includes raw silk.

The full significance of this transition to 'finished' exports did not become apparent until about 1930. Up to that period Japan was still largely in a state of capital development, building up reserves of capital, productive capacity, and technical and managerial skill. Though that chapter in her evolution cannot be regarded as yet entirely closed, from 1930 onwards the completion of certain parts of her new productive machinery has been returning a dividend in the shape of increased exports of manufactured goods. Among these the enormous expansion in textile exports has tended to overshadow the development of smaller lines of manufactures. The growth in the export of Japanese cotton piece-goods, compared with that of Great Britain and other countries, has been as follows:

World Cotton Textile Exports

(In million square yards)

	1927	1928	1929	1930	1931	1932	1933	1934
U.K. . . .	4,117	3,886	3,672	2,407	1,716	2,198	2,032	1,993
Japan . . .	1,364	1,419	1,791	1,572	1,414	2,032	2,089	2,577
Others . . .	2,489	2,502	2,414	1,889	1,668	1,352	1,231	
World . . .	7,970	7,787	7,877	5,868	4,798	5,582	5,372	
Japan as per cent. of world . . .	17	18	23	27	29	36	39	

Meanwhile the expansion in other lines may be coming to prove little less important. Table I annexed to this chapter illustrates the recent increase in volume and value of the export of a number of Japanese manufacturers less important individually than cotton but in the aggregate substantial.

Accompanying the increase in the range of manufactured exports already remarked upon there has been a widening in the range of markets served. For a long time by far the greater part of Japanese exports went to Asiatic and Pacific markets and there the pressure on Western competitors was not very acute so long as other markets were expanding. Recent years have seen the spread of Japanese activities to a much wider area. Viewed quantitatively the new trade in many cases is still comparatively small; it is the rapidity with which the advance has taken

place, the fact that it has coincided with a severe contraction of overseas markets as a whole, and finally the threat which it implies to old established interests—whether of the mother-country as in colonial areas, or of rising domestic industries, as in the case of India—that have lent it so much gravity.

Here let us turn aside to give momentary attention to certain facts and circumstances connected with the development of Japanese trade competition which are of importance for seeing the situation in correct focus. Firstly it should be remarked that, leaving aside the question of 'pressure of population' dealt with later in this book, the growth of the Japanese export trade cannot in any case be considered 'unnatural' or 'abnormal'. Exports per head of population, which had been rising—although somewhat erratically—up till 1925, fell almost continuously between 1925 and 1931, declining in the aggregate by more than 50 per cent.; they still remain about 25 per cent. below the 1925 level. A second point to mention is that Japan's invasion of new markets, which has proved so disturbing to industrial interests in the West, is largely the result of events which have robbed her temporarily at least of some of her older overseas custom. The collapse of the American demand for raw silk, which as a luxury article was exceptionally heavily hit by the economic distress, reduced enormously Japan's most important single export and converted her trade with the United States from a 'favourable' to an 'unfavourable' basis. In China, again, which was Japan's most important market, a slump in purchasing power, due partly to silver depreciation, combined with a political boycott of Japanese goods, produced a decline in Japan's exports to China of more than 60 per cent. as between 1928 and 1933. This again affected Japan's balance of payments and provided a powerful stimulus to the search for new fields for exports, a stimulus which, it should, however, be noted, will tend to decline in strength with the dying-down of the boycott and the recovery—already pronounced in 1934—of Japanese exports to China.

A third fact of importance is that the low price of Japanese export goods cannot be attributed either to a deliberate dumping policy, or to an economic necessity to sell 'at all costs'. The recent profits of Japanese industrial enterprises manufacturing for export give evidence of this, as may be seen from the following figures compiled by the Mitsubishi Economic Research Institute.

Percentage Profits

	<i>1930-1 average</i>	<i>1933</i>
Cotton spinning . . .	5.8	9.1
Cotton weaving . . .	1.4	13.7
Rayon	8.6	19.5
Shipping	8.2	0.6
Ship-building . . .	0.6	1.5
Steel	1.6	14.5
Machinery	1.5	6.7

The cotton-weaving industry, which has figured largest in international competition, is shown by these figures to have worked in 1933 on a substantial basis of profit. The similar prosperity in the steel trade may, one should mention, be ascribed primarily to the requirements of Manchurian development and to armaments manufacture.

To turn back again to the position created by Japanese export expansion in world markets, let us first analyse the change in the direction of Japanese trade since 1928. Table II at the end of this section shows the trend in relation to countries grouped according to continents.

The facts of interest which emerge from a study of this table are, firstly, the paramount importance of Asiatic markets (exports to the United States stand in a special category, consisting, as they do, so largely of raw silk) and also the extent to which the decline in trade with China has been made good not so much by increased exports to countries in other continents as to other Asiatic countries, notably India, the Netherlands East Indies, Malaya, and Siam. Exports to newer markets have, in many cases, doubled within the last five years, as in the case of South Africa, East Africa, Egypt, and Latin America, and the rising

importance of these markets compared with Asiatic and Pacific countries is very apparent. As yet, however, these markets do not constitute a vital proportion of the total Japanese export market—a fact which is considered by some observers to render more hopeful the prospects of a workable settlement of the problem of competition with Western exporting countries by means of a geographical allocation of markets.

We will now proceed to analyse the position from the competitive point of view in the principal individual markets.

NETHERLANDS EAST INDIES

While the most rapid advance of Japanese exports has taken place in the markets of the British colonies, it is in the Netherlands East Indies that Japan has achieved her most substantial increase of trade. The simple demands of a large and primitive native population presented an especially favourable opportunity to Japan owing to her geographical advantage. The opportunity was made even more favourable by the colonial policy of the Netherlands Government, traditionally the most liberal in the world, no preference being asked for the industries of the mother-country and colonial markets being open to all comers. Up to 1932 Holland was, somewhat naturally, the largest supplier of imports, but its proportion was never very high. Great Britain—both directly and through Singapore—Germany, the United States, and India, as well as Japan, all found a profitable market in the Netherlands Indies. But while imports from the other countries declined heavily after 1930, those from Japan have been maintained and the Japanese share in the total increased from 11.6 per cent. in 1930 to 16.4 per cent. in 1931, 21.2 per cent. in 1932, and 31.6 per cent. in 1933. Imports from Japan in 1933 remained in value almost at the 1930 level, while imports from Holland had fallen by 75 per cent., from Great Britain by 60 per cent., from Germany by 70 per cent., and from America by 80 per cent. This result was achieved in spite of the fact that a large proportion of

the retail trade in this area is handled by Chinese shopkeepers, many of whom supported the Chinese boycott of Japanese goods. Increased duties imposed during 1932—primarily for revenue purposes—had no effect in curtailing imports from Japan, and in September 1933, by virtue of the Crisis Import Ordinance, the Governor-General of Batavia was empowered against all precedent to introduce an emergency import quota system. Imports of the various categories of cotton textiles and mixtures have accordingly been regulated by a number of quota enactments since the beginning of 1934. Previously, action had been taken to protect the native industries producing cement and beer and under the new Ordinance the control of the import of these commodities was further restricted. In general, the quota system has been applied with moderation and the share of the import trade reserved for manufacturers in the Netherlands is relatively modest. Meanwhile Japan had already captured a very large proportion of the trade in all the lines she is competent to supply, while the pressure of native demand for cheap goods—especially strong on account of the comparatively high cost and low standard of living—is an obstacle to a further limitation of her imports. Japan is, at the same time, showing a realization of the necessity of placing her trade with the Netherlands Indies on a reciprocal basis, following the precedent set in her agreement with India. This she can conveniently do, being a large importer of tropical products such as oil, rubber, and sugar.

Between 1930 and 1933 Japan increased her share in the import trade of the Netherlands East Indies from 11½ to 31 per cent. at the expense of all other competitors, whose percentage share diminished in every case. The figures for imports of all sorts are given in Table IV, while Tables V, VI, and VII show the extent of Japanese competition in certain of the more important products, the case of cotton textiles being especially striking when the Japanese imports are compared with those from the United Kingdom and from Holland, the mother-country. In view of Japan's geographical advantage and the fact

that she can conveniently increase substantially her purchases of Netherlands Indian produce, there is good ground for regarding this market as irrevocably lost to Western manufacturers.

CHINA

Up to a few years ago a feature of the foreign trade of China had been the progressive advance of Japanese industrial imports at the expense of the Western nations. This applied to the period when cotton goods were the staple of Chinese trade in manufactured articles. The trend of development from 1931 onwards has been obscured by the influence of several outstanding factors, the loss of Manchuria, the impoverishment of the Chinese population, the boycott of Japanese goods, and currency fluctuations. In so far, however, as the cotton trade is concerned, the present tendency is towards the steady elimination of foreign imports as a whole, Japanese and Western alike, through the growth of the native industry and the protection afforded by a rising import tariff. The correspondence between the general decline of foreign imports and the expansion of native factories is considered later in the chapter dealing with China;¹ here it need only be noted, as a measure of the extent to which China is at the present time supplying her current needs of cotton textiles, that her imports of cotton cloth, which were once at the head of the list, now represent only 2.9 per cent. of her total imports.

China's principal requirements from abroad now are, as Table VIII shows, mainly raw materials, foodstuffs, and machinery with which to sustain her growing industry. Already by 1934, 50 per cent. of her imports by value was accounted for by cereals, oils, fats and waxes, metals and minerals, raw cotton, machinery, and metal manufactures. These are not in the main goods which Japan can provide from her own resources, and where she supplies them to China she does so largely by importing the prime product herself and re-exporting a part-manufactured product, as in

¹ See below, p. 181.

the case of wheat-flour and sugar. Up to 1930 about half of Japan's exports to China still consisted of cotton piece-goods, of which she supplied roughly 70 per cent. of Chinese import requirements. By 1933 the value of Japanese piece-goods exports to China had fallen, however, from 150 million yen in 1929 to 25 million yen and their importance in relation to the total of Japanese exports to China from 42 per cent. to less than 25 per cent.

In the same period Japan's share of the total import trade of China fell from 25 to 9.7 per cent. This decline in the Japanese proportion is partially explainable by two 'accidental' factors, the elimination of Manchuria from the Chinese trade returns and the anti-Japanese boycott which prevailed in China after the Manchurian affair. Moreover, in so far as a lessening of Japan's share in China's imports is due to the increased importance among the latter of foodstuffs or raw materials, this leaves unaffected the question with which we are here concerned, namely, competition in manufactured articles. Nevertheless the declining importance of cotton goods and the growing imports of machinery and metal manufactures into China mean that in this market Japan has in some respects a lesser advantage over Western manufacturers than in some other Eastern markets, since the heavy industries are precisely those in the development of which, as will be shown later, she is heavily handicapped. Under the heading of 'machinery', for instance, the Chinese returns for 1932 show Japanese imports as being of the value of 2½ million gold units, while British imports were over 10 millions and those from the United States between 4 and 5 millions, while in electrical materials there was no very great margin between the imports from the three countries.

If and when prosperity returns to China, she is likely to furnish a good market for the type of low-grade consumption goods which Japan can supply far better than Western countries. This market, however, the latter can well afford to forgo if, as may well be the case, the demand continues to expand for the capital equipment which they can produce at an advantage over Japan and to

the manufacture of which China herself cannot hope to attain for a long period ahead.

BRITISH INDIA

Japan's share in the import trade of British India was greatly increased by the War, but it was not until 1931-2 that she supplied more than 10 per cent. of India's import requirements. Over the same period Great Britain's share fell from 64.2 (1913-14) to 35.3 per cent. (1931-2), a change which was brought about not only by Japan's entry into this market on a large scale, but also by increased competition from other manufacturing countries, in particular the United States.

Japanese competition in the Indian market takes a very similar form to that in the Netherlands Indies. As the subject is reverted to somewhat fully in the chapter concerning India,¹ it need only be dealt with summarily here. Table IX shows the principal articles in which Japanese manufacturers are interested and the principal countries with which they compete.

A noticeable feature of the Indian market during the last five trading years, as revealed in these figures, has been the extent to which total imports have declined. This has been due mainly to three causes—rising tariffs, diminished internal purchasing power, and the extension of Indian domestic industries. Had the rising tide of Japanese competition in India coincided with a rising total demand, it would have been less severely felt by competitors; but it was unfortunately otherwise. Foreign imports as a whole were adversely affected by a continually rising level of customs duties, for which the pressure of Japanese imports was partly responsible, although budgetary difficulties and the desire to protect infant industries were also among the causes.² The duty on cotton piece-goods of non-British origin was raised, for instance, four times between 1930 and August 1932, and in June of the following year

¹ See pp. 272 et seq. and the table on p. 296 showing the percentage distribution of Indian trade in different years.

² India's tariff development is dealt with on p. 262.

reached an average level of 75 per cent. *ad valorem*. Owing to the existence of a 'most-favoured nation' clause in the current Indo-Japanese trade agreement, these increases were of general application and had disastrous effects on the imports of foreign competitors with higher production costs than Japan. In her case no increase in tariffs served to stem the flood of Japanese imports and the outcome was the denunciation of the current treaty and the conclusion of a new one after protracted negotiations in January 1934, regulating Japanese cotton piece-goods imports on a barter basis. Under the new agreement, the tariff was lowered and the sale by Japan of 325 million yards of piece-goods was made conditional on a simultaneous purchase of 1 million bales of Indian raw cotton; sales above the basic quota were permitted at the rate of an additional 1 million yards for every additional 10,000 bales of Indian cotton purchased.¹ It is, as yet, too early to examine the results of this agreement in detail, but it appears that the Japanese share of the Indian market has now been much reduced and that the greater part of the difference has gone to the Indian industry since the tariff remains too high for other manufacturers to surmount. As a result Japan is already showing some impatience with the working of the agreement within the first twelve months of its operation. On the other hand, the result of the exclusion of rayon goods and rayon-cotton mixtures from the agreement seems to have left Japan a loophole of which she is making full use. It will be noticed that the fall in the import of mixtures during the depression was relatively small and there is no doubt that they are competing to an increasing extent in the Indian market with cotton goods.

Already in the trading year April 1933 to March 1934 Japan lost a little ground to Lancashire in the Indian textile market. Imports from all sources declined in this year but the fall was greater in the case of Japanese goods than of British, Japan supplying only 44 per cent. of India's textile imports in 1933-4 against 47 per cent. in

¹ The terms of the Indo-Japanese Cotton Agreement are set out more fully in Chapter IV, see p. 277 et seq.

1932-3, while Lancashire supplied 54 per cent. against 49 per cent.

Throughout the year 1934-5 the Indo-Japanese agreement was in force, but although Japan's purchases of Indian raw cotton far exceeded the minimum which under the treaty she contracted to take, her return consignments of cotton piece-goods were materially below the maximum which she was entitled to send (374 million yards against 400 million).

During the year Japanese exporters lost ground in all categories except 'greys' (in the import of which Japan had established something approaching a monopoly) and it was Lancashire which supplied the bulk of the increase in Indian demands for cotton goods generally. The relative position in regard to cotton piece-goods imports as a whole and in regard to the most important individual categories is shown by the following figures:

Imports into India

(millions of yards)

	1932-3	1933-4	1934-5
All Cotton piece-goods: Total .	1,193	760	943
From U.K. . . .	586	414	552
„ Japan	578	340	373
Bleached: Total	412	261	285
From U.K.	281	184	236
„ Japan	120	75	40
Dyed: Total	147	102	127
From U.K.	94	76	102
„ Japan	43	24	18
Plain Grey: Total	217	140	158
From U.K.	32	27	25
„ Japan	184	112	132

✓ At the same time Japan's export to India of rayon fabrics, which had fallen by 19 million yards between 1932-3 and 1933-4 more than recovered ground, exports for 1934-5 exceeding those of the previous year by 45 million yards.

EGYPT

It is interesting to compare the course of events in India with recent developments in Egypt. Japanese goods obtained an early foothold in this market and have made it a kind of advanced base for operations in all North African markets. Japanese exports to Egypt increased from 23 million yen in 1926 to 55.6 million by 1933. The greater part of this total is composed of cotton textiles, although artificial silk has been growing in importance in recent years. As the Japanese cotton industry has itself passed over to the spinning of finer counts, it has increased its purchases of Egyptian raw cotton. These were inconsiderable up to the end of 1931 but had expanded greatly by 1933 when Japanese imports from Egypt rose to 26.5 million yen, of which the greater part represented raw cotton.

These increased purchases of Egyptian raw cotton are not only a reflection of technical changes in the Japanese cotton industry, but represent Japan's answer to the growing uneasiness on the part of the native Egyptian cotton manufacturing industry. The pressure of Japanese competition has been felt with increasing severity both at home and in the neighbouring markets of Asia Minor, and recent efforts on the part of Japan further to expand her trade in Egypt have met in that country with vociferous opposition, to which the existing state of the balance of trade between the two countries lent support. Hence it became politic for Japan to provide an improved market for Egypt's chief export. The ingredients of the situation are very similar to those which were present in India in 1932-3, and it will be interesting to see whether a solution will be sought along lines similar to those adopted in the Indo-Japanese cotton agreement referred to above.

THE BRITISH EMPIRE

Within the British Empire Japanese competition has, on the whole, been felt more severely in colonial territories than in Great Britain itself or the Dominions, where for the

most part prompt action by tariffs and other methods has been taken whenever a rapid influx of Japanese goods has been threatened. Japan supplies barely 1 per cent. of the imports of Great Britain or Canada and 6 per cent. of the imports of Australia, while an incipient attack on the South African market was checked by the anti-currency depreciation tariff of 1932 and by the Ottawa Agreements. At the same time Japan is an important buyer of the products of all the first three countries, and has a proportionately large adverse balance of trade with each. The relatively small progress made up to the present by Japanese goods imported into Great Britain and Australia is shown by Tables X and XI.

British anxiety concerning Japanese competition in the Dominions centres therefore less in the existing position than in the trend of development, which may result in a very different future position. Though they were among the first to take tariff action against Japanese goods, the Dominions are now finding better prospects for the sale of their agricultural surpluses to the growing populations of the East than to the almost stationary populations of the West. There is no doubt that this fact is giving rise to a conflict between apparent economic expediency and racial and national loyalties which will only be reconciled with difficulty. The problem is a wide one which involves more than the immediate issues, and is of such importance that it has been left for detailed examination in a separate chapter of this book.

It is not unnatural that Japanese goods should have met with more success in the relatively undeveloped colonial markets. In the first place they have not to compete there with the established interests of domestic industries; secondly, their low price, even when combined with low quality, appeals to populations with a purchasing power that is low at all times and has been further reduced in recent years by depression. In the case of a considerable range of imports there is reason to doubt whether, if the Japanese source of supply were eliminated, an approximately equivalent increase in imports from other countries

would take place. It is, in fact, surprising to note the extent to which the total consumption of these areas has been maintained during the depression period in spite of considerably reduced purchasing power. One can only conclude provisionally that Japanese industry, by reason of the low prices at which it can sell its products, has tapped new low levels of demand which Western manufacturers, with their higher production costs, have been unable, and continue to be unable, to satisfy. The correctness of this conclusion must await the test of the operation of the colonial piece-goods quota policy instituted after the break-down of the Anglo-Japanese trade conversations early in 1934.

At the present time the statistics available are inadequate for forming conclusions, although some figures have already appeared showing the effects of the operation of the Colonial quotas in the second half of 1934.

Following the break-down of the Anglo-Japanese negotiations for an apportionment of world markets by agreement in the spring of 1934, the British Government took the step of instituting quotas for cotton and rayon textile imports in all Crown Colonies, where possible, from May 7th, 1934. By the middle of July the necessary legislation had been passed in nearly every Crown Colony. In the West African Colonies—Nigeria, Gold Coast, Gambia, and Sierra Leone—the quotas were applied to textile imports from Japan only. This was made possible by the fact that the most-favoured-nation agreement with Japan with regard to West Africa had been denounced. In Ceylon, British Malaya, Mauritius, British Somaliland, the West Indies, Cyprus, Malta, and the Pacific colonies, imports of textiles from all foreign countries were subjected to regulation by quota. Only in the important East African colonies was no action taken since the Open Door is maintained in the Congo Basin by the pre-war treaty of Berlin.

Although they differ as to detail in the way in which they are applied, the quotas were all fixed on the basis of imports in the period 1927–31. For this reason they are in most cases very much lower for Japan than her actual

shipments in 1932 and 1933. For instance, the quotas fixed for the full year 1935 for Japanese textiles entering the Straits Settlements and Ceylon compare as follows with the actual figures for the immediately preceding years:

(In million yards)

	Quota*	Actual Imports					
	1935	1929	1930	1931	1932	1933	1934
Straits Settlements	34.7	29.5	44.6	41.3	82.2	90.4	95.2
Ceylon	12.8	8.2	13.4	23.7	40.4	41.4	52.2

* Including rayon.

Not all the available figures relating to imports of cotton textiles during 1934 into the Crown Colonies show the effectiveness of the quotas. Whereas the figures for textile imports month by month into Nigeria given in Table XII demonstrate clearly the abrupt curtailment of supplies from Japan as soon as the quotas were enforced, in other cases the Japanese quota for 1934 was considerably exceeded. In the Straits Settlements the excess was 10 million yards which will be subtracted from the quota for 1935, though it is difficult to see how this will prevent a further excess from occurring. In some other colonies, however, imports in excess of the quota are only permitted on payment of a heavy penal duty. It appears, therefore, that although certain administrative adjustments in the operation of the quotas will probably be necessary, they are achieving their object of drastically curtailing the amount of textile imports from Japan. How far the displacement of Japanese goods on this scale will result generally in an equivalent recovery in the demand for the products of Lancashire, only time can show, though in one case, at least, namely that of Jamaica, the returns, as given in Table XIII, show a remarkably rapid rise in imports of British rayon consequent upon the introduction of the quota. It has to be considered, at the same time, that the partial exclusion of Japanese piece-goods from the Empire markets causes Japan to press her exports still harder in 'neutral' markets

where the British Government has no jurisdiction and where Japan and Lancashire must compete on an equal basis, while account must also be taken of the possible difficulty of maintaining restrictions liable to create dissatisfaction among native populations who find themselves precluded thereby from obtaining the cheapest goods.

In view of the multiplicity of customs areas in the Colonial Empire, it has been impossible to examine more than the sample of markets given in Table XIV, where the largest and most important in each group have been taken and analysed in respect of imports of cotton piece-goods from Great Britain and Japan respectively. It should not be forgotten that the increase in Japanese exports to these areas has occurred not only in the case of cotton piece-goods, but also of rayon tissues, motor tyres, bicycles, rubber shoes, pottery and glass, and a number of other miscellaneous manufactures. It is competition in cotton goods, however, which has caused the largest repercussions.

From the figures given in the table a number of tentative conclusions can be drawn. In the first place, although it grew at an alarming rate, Japanese competition in West Africa and the West Indies did not succeed in capturing a large proportion of the market. But in view of the rapidity of Japan's advance, competing manufacturers may be excused for having displayed considerable anxiety about her future progress in these markets.

In the three large markets of East Africa, Ceylon, and British Malaya, the threat which elsewhere has remained a threat has long since been translated into action; Japan supplied 75, 68, and 68 per cent. respectively of the consumption of East Africa, Ceylon, and Malaya in 1933, against 30, 14, and 21 per cent. in 1929. Her early and continued success in East Africa is ample evidence of the appeal of cheap Japanese goods to primitive populations; in fact not the least striking feature of these figures is the extent to which the total volume of consumption has been maintained, and in some cases more than maintained, in spite of the catastrophic effects of the fall in the price of raw materials on the purchasing power of consumers.

Even in such a relatively well-developed market as Ceylon, it is interesting to find that the quota policy was only introduced in the face of strenuous local opposition and that continued efforts have since been made to secure its abrogation on every available pretext, as for instance, the fever epidemic of 1934-5.

That the influx of cheap Japanese goods is welcome to the consumer is, however, of little comfort to the manufacturer who has formerly supplied that particular market for many years. Further examination of Table XIV reveals that other foreign textile industries have suffered from Japanese competition even more severely than Lancashire, which enjoys the advantage of preferential treatment. When the facts are faced it seems unreasonable to hope that under free marketing conditions Western manufacturers can ever regain their supremacy in the sale of low-grade piece-goods in bulk markets, and indeed many manufacturers would seem to have become more or less resigned to this ultimate conclusion. Changes which might prove tolerable if extended over a long period and under regulated conditions which would permit the gradual amortization of redundant plant have proved exceedingly damaging to Western industries when concentrated within a short space of time. Lancashire, in particular, has been forced to face this most serious external problem at a time when her internal difficulties were never more acute. It is, in fact, the rapidity with which the highly organized Japanese export trade is capable of invading and capturing new markets by reason of its enormous price advantage, that inflicts so much suffering upon Western industries, no time being left for the adjustment of the productive machinery of the latter, nor opportunities for an orderly and dignified retreat. This is the burden of the case for a co-operative solution to the present struggle, although it may be advanced from the other side that Lancashire has done all too little on her part to soften the impact of Japanese competition by effecting the necessary overhaul of her own system. These arguments, however, are examined in detail at a later stage in this volume.

✓ The quickness with which old commercial connexions have been severed is well illustrated by the analysis of two markets—Tanganyika and Palestine—contained in Tables XV and XVI. These tables show the quantity of piece-goods imported from each principal country in recent years and the average import values. The latter cannot be regarded as other than a rough guide to the extent of Japan's price advantage since there is certain to be some difference in the quality of the materials within the main categories analysed. Even so it is evident that not even the most favourable circumstances of situation and labour costs, such as Egypt enjoys in the Palestine market, and India in Tanganyika, can do more than reduce prices approximately to the Japanese level, while Lancashire goods are undercut by anything up to 60 per cent. In present circumstances, moreover, the effect of Japanese prices on the sales of her competitors is apt to be even more severe than the figures showing the proportionate share of Japanese goods in certain markets would alone indicate. Even though adequate supplies of cheap Japanese goods may not be available at any moment, consumers are liable to postpone buying from alternative sources in the knowledge that, as soon as sufficient Japanese goods are available, they will be able to meet their needs at, say, half the cost. Even though these cheap supplies may not eventually materialize, the very uncertainty of the situation must increase the anxieties and the costs of other merchants who cannot rely on steady sales and therefore dare not carry as extensive stocks as they would otherwise feel able to do.

✓ So far, as has been shown, the main pressure upon Western manufacturers has come through the competition of Japanese cotton piece-goods with Western cotton manufactures and that mainly in the lower qualities. The assumption that Lancashire and European manufacturers will not have so much difficulty over the long period in retaining their hold over the better quality markets is, however, beginning to be shaken by the growing importance of the rayon industry in the Japanese export trade. Low quality rayon goods from Japan offer a serious threat to established

interests in the better quality market for cottons, a more serious threat, perhaps, than any probable improvement in the average quality of Japanese cotton textiles themselves. Japan, coming late upon the scene, is developing her rayon exports to an extent that has never been approached by earlier manufacturers, as is shown in Table XVII. It can be seen from the analysis given of the destination of Japanese rayon exports in Table XVIII that they have been consigned largely to the better quality markets, for instance Australia, Egypt, Argentine, and Uruguay. Japan's startling and rapid success in this branch is mainly due to the fact that she has adopted an entirely different policy with regard to rayon to that of most Western manufacturers. (The latter have concentrated on the development of a very high quality fabric for supplying the home market; Japan has tended to produce a cheaper quality with a less specialized appeal.) As a result the import values of Japanese short-length rayon goods in Australia, for instance, have been lower per pound of *cloth* than the average export value of a pound of rayon *yarn* from Lancashire. The extent to which Japanese rayon goods in general are able to undercut Lancashire cotton goods is to be seen from the following figures of average values per yard for various kinds of material imported into Australia in 1933, compiled by the Economic Department of the Joint Committee of Cotton Trade Organizations:

	<i>Pence per yard.</i>
FROM JAPAN	
Rayon crêpes	8.0
Rayon satins	4.6
Cotton crêpes	2.2
Cotton satins	3.6
Cotton prints	2.6
Silk crêpes	13.3
Silk satins	10.0
FROM U.K.	
Rayon piece-goods	21.6
Cotton and rayon mixtures	14.1
Cotton prints	6.3
Cotton piece dyed	6.4

COLONIAL MARKETS OF OTHER WESTERN POWERS

It is interesting to compare the situation that has arisen through Japanese competition in the colonial territories of the Netherlands and Great Britain with the position in the overseas possessions of another colonial power, France. It has already been seen that liberal traditions of government and the maintenance up till recently of the Open Door has greatly assisted the progress of Japanese goods in both the British Crown Colonies and in the Netherlands Indies. The French colonial system, being entirely different and based on a policy of assimilation, has been far less favourable to Japanese trade expansion. Thus Japanese exports to Algeria, thanks to a high tariff wall, actually decreased between 1930 and 1933 from Fr. 1,208,000 to Fr. 1,088,000. Similarly in Tunis, after a big jump between 1930 and 1932, Japanese goods have continued to lose ground. In French Morocco, however, where the Open Door is maintained under the Act of Algeciras, the story is different. From a position of negligible importance in 1931, Moroccan imports from Japan advanced to tenth place in order of importance in 1932, and sixth in 1933. By January 1934 Japan had taken second place after France. This expansion took place at a time when Moroccan trade with all the principal European countries—France, Great Britain, Belgium, and Italy—was declining heavily. Nearly half of the total imports from Japan in 1933 consisted of cotton piece-goods (Fr. 30,350,508); artificial silk piece-goods accounted for a further Fr. 18,635,553. The remainder of the total of Fr. 65,000,000 representing Japanese imports consisted mainly of made-up clothing, rubber shoes, and tea. In addition there were small amounts of canned fish, pottery and glassware, and electric lamps. The Italian silk industry, which was successfully undercutting Lyons by about 20 per cent., was overwhelmed in the Moroccan markets by Japanese goods in 1933. In the course of eighteen months in 1932-4, Lancashire lost about four-fifths of her Moroccan market in bleached cottons. This

progress is not surprising in view of the prices at which Japanese goods have appeared on the Moroccan market. The following figures show the prices at which Japanese goods have been quoted c.i.f. Casablanca compared with the works cost of similar items in France:

	<i>Japanese</i>	<i>French</i>
Cotton piece-goods . . .	1 fr. 27 per metre	4 fr. 75 per metre
Artificial silk pieces . . .	36 fr. per dozen	60 fr. per dozen
Canvas and rubber shoes . .	32 fr. per dozen	..

The invasion of this market was prepared with the usual thoroughness by the Osaka export associations.¹

In French West Africa the advance of Japanese goods has been rapid, although the total proportion has never become large. An increase in the tariff at the end of 1932 proved ineffective and the position is now regulated by quotas. During 1934 a Japanese ship was visiting all the West Coast ports in the role partly of a travelling exhibition, partly of an itinerant emporium. On this occasion motor-cars were offered for 4,000 francs (about £55), bicycles for 72 francs (£1), typewriters for 180 francs (£2 10s.) and bicycle tubes at 1 franc ($3\frac{1}{2}d.$). It is apparently contemplated that this expedition will become a regular feature of West African trade.

Similar evidence of severe price competition is forthcoming from the Portuguese and Belgian colonies in Africa. Japanese exports to the Belgian Congo increased by 100 per cent. in volume and 30 per cent. in value between 1931 and 1932; imports of Japanese dyed cotton piece-goods increased in the same period from 12,366 to 72,500 kilograms. In Tripoli and Italian Somaliland, however, imports from Japan still accounted for less than 1 per cent. of the total in 1932.

OTHER WORLD MARKETS

The foregoing analysis of Japanese competition has been concerned mostly with the larger markets in which Japan

¹ For a further account of Japanese competition in Africa see Martelli-Chantard, *L'Expansion japonaise en Afrique*, published by Le Comité de l'Afrique Française, 21 Rue Cassette, Paris, 1934.

has been conspicuously successful. In most cases she has, till recently at least, enjoyed certain advantages. In some cases she was herself a large net importer from the country in question, e.g. of wheat and wool from Australia and raw cotton from India, and so had a claim to sell her goods in return. In other cases there existed a large low-grade demand on the part of a native population under a colonial administration, as in the African colonies, the Netherlands East Indies, Ceylon, and Malaya, so that, whatever the cost to established interests, it was, for political and humanitarian reasons, difficult for the administrations to place heavy restrictions on imports which were admittedly satisfying the needs of the populations under their care. Her invasion of these markets has arisen partly, moreover, from the closing of other and older markets such as resulted from the Chinese boycott and the fall in American consumption of silk. But the process of restriction in old markets which led to the opening of new ones now shows signs of beginning to operate in these new markets themselves. Trade with India is henceforth to be limited and regulated on reciprocal terms, and in the Netherlands East Indies the local administration has been endeavouring to negotiate with Japan a settlement along similar lines,¹ while in the British Crown Colonies a quota system for piece-goods has now been applied. It is hard for Japan to challenge the application of the reciprocal principle on which all these restrictions are based, contending, as she does, that much of the expansion of her exports in previous years has been guided by a desire to redress her own unfavourable balance of trade. Again, in the countries towards which Japan's latest efforts at opening markets are directed, e.g. the Balkans, the Near East, and the South American States, Japan is faced with a very different state of affairs from that met with in the undeveloped markets which she has already acquired. In many of these countries there are domestic industries to contend with and most of them are well experienced in commercial negotiation and the prac-

¹ A deadlock in the conversations occurred, however, towards the end of 1934.

tice of tariff building. Some temporary success was achieved by Japan in Turkey, Persia, Iraq, and Egypt, but the two former have already dealt a severe blow at Japanese goods by instituting a system of controlled trade on severely reciprocal lines. Egypt too, whose domestic industries are feeling the pinch of Japanese competition, is showing a tendency to depart from her early readiness to accept unlimited quantities of Japanese goods.

Japan, however, is by no means badly equipped for negotiating with countries which demand a reciprocal trade. She has to import nearly every raw material and is anxious to do so in the way which will reflect the maximum amount of benefit on her export trade. Already she has become a considerable buyer of Egyptian cotton, and has recently received experimental shipments from Turkey. Hopes of acquiring a part of the South African market have not been abandoned, and the purchase of African wool has been decided upon, even though it will cost more than Australian.¹ Similarly, the purchase on a reciprocal basis of oil, tobacco, turpentine, olive oil, and opium from the Balkan and Near Eastern countries is being considered.

This tendency is particularly well illustrated in the Latin American markets. Japan's exports to Central America have increased from 3 million yen in 1931 to 16 million yen in 1933 and to South America from 10 million yen to 30 million yen in the same period; exports of cotton piece-goods to the five principal South American markets increased between 1930 and 1933 from 23 to 57 million square yards. Some of the results of the Japanese drive in the South American market (principally in Argentina, Chile, and Uruguay) are shown in Tables XIX and XX. It is surmisable, however—and tariff action by the South American republics has confirmed the impression—that a further expansion will require an increase, in exchange, of Japanese purchases of goods from Latin America. The total export surplus to Latin America is now about 13 million yen annually and efforts have been made to equalize

¹ See Chapter VI, p. 356.

this balance by purchases of Argentine wheat and wool and Peruvian and Brazilian cotton, so that Japanese imports from South America have, according to the data available at the moment, almost doubled during 1934.

The necessity of strict reciprocity, almost of barter, in developing trade with South America, was again emphasized early in 1935 in the report of an official delegation on its return to Japan from a tour of the Latin American republics in search of new trade openings.

For the purpose of giving effect to the policy of developing reciprocal trade with countries to which Japan aims at exporting her factory products merchant and manufacturers' organizations have been established, among which may be mentioned the 'Near East Trade Promotion Society', and 'Turco-Japanese Traders' Association'. There are similar organizations for dealing with nearly every market where an expansion of reciprocal trade is contemplated.

CONCLUSION ✓

Although in the space of a single chapter it has only been possible to deal with a few aspects of Japanese competition in markets where it has been most severely felt, certain outstanding characteristics have already emerged and may be mentioned shortly. For the conclusions to be drawn from them the reader must turn to other parts of this book.

Japan's hold on neighbouring Eastern markets was established at a relatively early date and as a more or less direct consequence of the War. Her expansion into other markets appears to have been caused only in part by the expansion of her own productive capacity; the shrinkage of the established markets in the East with the coming of the depression was in itself a powerful incentive to Japan to try farther afield. From this point onwards, it seems that attempts to check Japanese trade expansion in any one area, such as India, have only led to the remarkably rapid appearance of Japanese goods in some other market. This process has been almost continuous and now that the

position in India, the Netherlands Indies, and the British Crown Colonies has been stabilized the pressure is being transferred to Eastern Europe and Latin America, which were in the first instance among the less promising markets and were therefore more or less ignored. It appears, therefore, that though individual manufacturers in Europe may have benefited by action taken on their behalf in certain controlled areas, European industries as a whole are not likely to have gained much on balance from piecemeal action taken against Japan.

On a more detailed examination of the position, one cannot help being struck by the fact that in the case of some markets in regard to which protests have been loudest, Japanese competition has been quantitatively only small. From this one must conclude that dislocation and discomfort have been caused as much by the threat and manner of Japanese competition as by its actual incidence on current trade. For instance, the very wide margins by which Japanese prices have undercut the established rates of European manufacturers seem not only to have caused intense anxiety among the latter concerning the probable future of Japanese competition if such a state of affairs is allowed to persist for even a year or two, but also to have established quickly among consumers, particularly in primitive markets, an entirely new standard of values with regard to the goods which they have been accustomed to buy. For this reason they may prefer to hold back from buying dearer, though better, goods even when there is no glut of the cheaper Japanese product. Thus a degree of dislocation may be caused quite out of proportion to the quantitative significance of Japanese competition at the time.

Up to the present, in fact, the competition which Japan presents to the manufacturing countries of the West is, as was said in the opening paragraphs of this chapter, due in the main to 'qualitative' causes. To what extent these causes will tend to become inoperative and in what degree both Japan herself and the other two Eastern countries dealt with in this book are likely to prove capable of expanding their volume of exports to the point of winning for

themselves a greatly increased proportion of world trade are questions the answers to which must be sought in the following chapters.

TABLE I. *Japanese Exports of Manufactured Articles*

	1929	1932	1933	1934
	(Quantity [millions])			
Artificial silk tissues (sq. yds.) . . .	48.7	241.6	260.0	345.7
Knitted goods (dozens) . . .	12.3	13.7	16.6	18.0
Window glass (sq. ft.) . . .	5.8	5.1	13.7	28.3
Glass bottles (dozens) . . .	15.6	16.5	19.1	20.4
Cycle tyres (Kin)* . . .	..	3.7	7.5	9.2
Printing paper (Kin) . . .	86.5	52.5	62.5	60.0
Iron, raw and semi-manufactured (Kin) . . .	64.1	193.0	384.0	584.0
Enamelled ware (Kin) . . .	20.8	16.9	22.9	13.1
Nails, screws, &c. (Kin) . . .	4.7	31.7	40.7	47.9
Electrical machinery (Kin). . .	4.3	2.4	4.1	5.0
Textile machinery (Kin) . . .	7.8	10.1	12.4	13.8
Clocks . . .	0.53	0.42	0.76	1.24
Electric lamps (gross) . . .	0.7	1.9	1.9	1.6
	(Value [millions of yen])			
Pottery and glass . . .	..	32.2	51.0	61.3
Drugs, chemicals, &c. . .	..	29.8	48.2	52.4
Foods, in tin and bottle . . .	..	22.8	47.0	49.2
Metal manufactures . . .	..	21.1	42.6	59.0
Boots and shoes . . .	..	20.7	29.6	21.5
Vehicles and parts . . .	..	11.5	28.3	46.6
Toys . . .	..	15.1	26.4	30.3
Oils, fats, waxes, soap . . .	..	19.8	26.3	33.0
Machinery . . .	..	10.9	25.9	57.8
Wood manufactures . . .	..	11.3	18.6	23.9
Lamps and parts . . .	..	12.8	15.9	15.7
Dyes and pigments . . .	..	6.0	11.7	15.5
Clocks and instruments . . .	..	4.8	11.7	19.5
Jewellery . . .	..	5.4	8.4	..
Plaits . . .	..	3.2	7.2	8.1

* 1 Kin = 1,3227 lb.

TABLE II. *Japanese Exports*

(In millions of yen)

<i>To</i>	1928	1929	1930	1931	1932	1933	1934
China Proper .	304.0	281.9	225.3	143.9	129.5	108.3	117.1
Hong Kong .	56.2	61.1	55.6	36.7	18.0	23.4	33.5
Manchuria .	69.1	68.8	35.6	11.9	25.9	82.1	107.1
Kwantung .	110.2	124.5	86.8	65.5	120.6	221.1	295.9
All China .	539.5	532.3	403.2	258.0	294.0	434.9	553.6
Straits Settlements	20.4	27.9	26.9	19.1	25.5	46.1	63.3
Netherlands East Indies .	73.4	87.1	66.0	63.4	100.3	157.5	158.5
British India .	146.0	198.1	129.3	110.4	192.5	205.2	258.0
Philippines .	29.1	30.6	28.4	20.4	22.4	24.1	36.5
Siam .	5.8	10.6	9.5	4.7	8.6	18.1	28.0
All Asia (incl. Asiatic Russia) .	834.9	915.2	704.0	505.0	677.6	930.6	1160.3
South Africa .	11.7	13.2	14.2	19.3	16.4	26.7	29.5
East Africa .	6.4	13.1	10.7	10.9	15.8	23.2	37.5
West Africa .	—	—	—	—	—	—	3.1
Egypt .	23.7	31.4	29.0	22.8	41.9	55.6	73.0
All Africa .	..	60.5	57.0	58.8	85.6	137.2	182.4
Latin America .	26.5	29.6	21.1	13.5	18.3	46.6	104.8
U.S.A. .	..	914.1	506.2	425.3	445.1	492.2	413.1
Europe .	..	..	127.9	104.1	127.2	182.0	236.9
Australia .	43.0	44.1	25.5	18.4	36.9	51.4	64.5

TABLE III. *Monthly Average Exports of Japanese Cotton Piece-goods*¹

(In million square yards)

<i>From Japan to</i>	1930	1931	1932	1933	1934*
1. China . . .	40.2	23.1	24.3	26.7	24.4
2. Dutch East Indies . . .	15.2	17.7	29.4	35.2	38.1
3. British India, Ceylon . . .	33.7	33.7	53.7	37.6	38.5
4. Other Asiatic countries . . .	22.6	20.4	25.2	24.1	37.3†
5. Egypt . . .	9.1	8.7	16.3	17.5	20.9
6. East Africa . . .	3.1	4.4	6.4	15.6	22.0†
7. Remainder . . .	7.1	9.8	14.0	17.5	28.5†
Total export . . .	131.0	117.8	169.3	174.2	209.7

* For 1934 nine months' average only.

† Distribution estimated on basis of five months' average.

To parallel the above figures the following table is added to show the course of the British cotton piece-goods trade analysed in similar fashion:

<i>From United Kingdom to</i>	1930	1931	1932	1933	1934*
1. Dominions . . .	20.7	19.4	23.9	29.2	30.8
2. Europe . . .	28.0	24.4	22.6	26.0	25.7
3. British India, Ceylon . . .	66.5	34.0	51.3	41.3	48.3
4. Other Asiatic countries . . .	24.6	21.9	28.8	16.9	10.5
5. Other American countries . . .	24.4	16.9	19.4	25.6	26.2
6. Other African countries . . .	28.7	20.4	30.4	23.3	15.2
7. Remainder . . .	7.7	6.0	6.8	7.0	8.3
Total export . . .	200.6	143.0	183.2	169.3	165.0

* For 1934 nine months' average only.

¹ *The Economist* of Feb. 9th, 1935.

TABLE IV. *Imports into the Netherlands East Indies
by Countries of Origin*
(In million guilders)

	1930	1931	1932	1933	1934 (Jan.-Oct.)
Japan (including Formosa) .	100.2	92.6	78.3	98.4	76.2
Dairen, Korea, and Vladivostok	11.6	8.6	4.2	3.5	..
Netherlands	163.3	98.6	58.1	39.3	30.3
Singapore	91.2	61.9	46.3	34.4	28.5
Great Britain	87.9	43.9	35.5	30.7	23.2
Germany	86.0	52.0	28.4	24.2	17.2
U.S.A.	90.4	51.4	24.6	15.6	14.2
British India	63.3	32.0	17.4	11.1	6.7
Total (including others) .	863.0	565.2	368.8	317.9	238.4

TABLE V. *Imports into the Netherlands East Indies
of Cotton Tissues by Countries of Origin*
(In million guilders)

	1931	1932	1933	1934 (Jan.-Nov.)
Japan	38.5	38.3	47.6	45.2
Netherlands	23.0	13.6	4.3	4.7
United Kingdom	10.1	8.5	4.0	2.3
Singapore and Malaya	9.6	7.5	5.0	2.7
Total (including others)	88.8	73.2	63.4	52.1

TABLE VI. *Imports into the Netherlands East Indies
of Rayon Tissues by Countries of Origin*
(In million guilders)

	1931	1932	1933*	1934* (Jan.-Nov.)
Japan	9.9	8.2	6.8	4.9
Singapore and Malaya	0.9	0.6	..	..
United Kingdom	0.5	0.4	0.3	0.1
Netherlands	0.2	0.2	0.3	0.1
Total (including others)	12.4	9.9	7.6	5.5

* Java and Madura only.

TABLE VII. *Miscellaneous Imports into the Netherlands East Indies from Japan*

(Figures in brackets show imports from Japan as percentage of all imports)

(In thousand guilders)

	1931	1932	1933
Iron manufactures . . .	3,740 (11·6)	4,596 (19·9)	4,077 (27·0)
Clothing . . .	4,641 (41·5)	3,859 (47·5)	3,360 (75·6)
Bicycles and parts. . .	1,029 (28·9)	849 (37·9)	2,016 (64·0)
Earthenware . . .	2,200 (66·0)	1,918 (73·2)	..
Rubber tyres . . .	1,316 (14·7)	681 (14·5)	1,412 (31·0)
Glass . . .	1,464 (36·5)	785 (9·1)	557 (53·9)
Toys . . .	826 (60·4)	602 (65·6)	900* (81·3)
Lamps and parts . . .	560 (28·0)	295 (27·2)	238* (46·7)
Beer . . .	306 (4·7)	631 (14·6)	2,670 (53·3)
Cement . . .	2,484 (89·0)	1,791 (94·8)	1,215 (96·4)

* Java and Madura only.

TABLE VIII. *Principal Imports into China in 1934*

	Value (million Chinese \$)	Per cent. of Total
Cereals and flour . . .	112·2	10·9
Oils, fats, waxes, soap, &c. . .	108·5	10·5
Metals and minerals . . .	99·0	9·6
Raw cotton and cotton yarns. . .	96·1	9·3
Machinery . . .	59·4	5·8
Metal manufactures . . .	53·9	5·2

TABLE IX. *Japanese Competition in British India*
Indian Imports
(In million rupees)

	1929-30	1930-1	1931-2	1932-3	1933-4	1934-5
COTTON PIECE-GOODS						
<i>Grey:</i>						
From Japan . . .	89.1	39.8	28.9	33.0	19.2	21.0
„ U.K.	117.6	28.1	9.6	17.6	16.1	14.3
„ China	2.0	0.5	0.6	0.1	..	0.1
„ Total	209.3	68.7	39.2	50.7	35.6	35.4
<i>White:</i>						
From Japan . . .	3.3	5.1	9.3	16.3	9.8	7.4
„ U.K.	120.3	52.3	40.2	52.7	38.5	43.2
„ Switzerland . .	3.5	1.9	1.7	2.5	1.0	1.2
„ Total	132.8	62.1	53.3	73.3	53.0	51.8
<i>Coloured:</i>						
From Japan . . .	34.5	14.4	16.3	29.2	17.5	20.2
„ U.K.	95.0	44.8	28.5	48.8	35.1	47.5
„ Italy	8.3	2.8	2.6	1.9	0.3	0.4
„ Switzerland . .	1.0	0.4	0.7	1.4	0.5	0.7
„ Netherlands . .	7.0	3.5	1.0	0.8	0.2	0.1
„ Total	151.5	68.2	50.5	83.4	69.9	69.9
COTTON TWIST AND YARN .						
From Japan . . .	16.4	8.4	8.3	16.1	9.4	10.8
„ U.K.	29.6	12.7	12.2	13.2	10.0	9.5
„ China	11.0	9.6	9.2	29.9	7.2	7.0
„ Total	60.0	30.8	29.9	37.9	27.4	27.4
COTTON HOSIERY						
From Japan . . .	12.3	7.7	4.2	6.1	6.9	5.7
„ U.S.A.	0.4	0.2	0.1	0.1	0.1	0.1
„ U.K.	0.1	0.1	0.1	0.1	0.3	0.1
„ Total	14.4	8.8	4.8	6.7	7.4	6.1
RAYON PIECE-GOODS						
From Japan . . .	14.0	15.0	20.9	25.2	15.8	17.7
„ Italy	5.1	2.0	1.6	2.2	1.4	1.2
„ U.K.	4.2	1.3	1.0	1.7	1.4	1.6
„ Germany . . .	1.0	1.4	0.5	0.8	0.2	0.2
„ Switzerland . .	4.3	1.5	0.8	0.4	0.9	0.5
„ Total	31.5	21.2	25.2	31.0	20.4	22.5
SILK PIECE-GOODS						
From Japan . . .	12.6	6.0	7.2	13.3	14.2	12.2
„ China	7.8	6.0	4.9	4.5	3.4	2.6
„ Total	22.3	12.7	12.6	18.1	18.0	15.0
GLASS AND GLASSWARE						
From Japan . . .	7.4	5.5	4.2	6.5	5.8	6.2
„ Czechoslovakia .	7.2	3.6	2.3	2.3	2.0	1.9
„ Germany . . .	3.4	2.4	2.0	1.8	1.4	1.4
„ Belgium . . .	2.4	1.8	1.3	1.5	1.3	1.1
„ U.K.	2.2	1.6	1.3	1.2	1.2	1.1
„ Total	25.2	16.5	12.2	14.2	12.6	12.7

TABLE IX (*cont.*):

	1929-30	1930-1	1931-2	1932-3	1933-4	1934-5
EARTHENWARE AND PORCELAIN						
From Japan . . .	3.1	2.1	1.7	3.2	2.8	2.3
„ U.K.	2.6	1.8	1.4	1.2	1.2	1.3
„ Total	7.2	4.8	3.8	4.9	4.5	4.0
HARDWARE						
From Japan . . .	2.6	2.1	1.6	3.0	3.5	3.0
„ Germany . . .	16.5	10.8	7.6	10.8	8.9	9.5
„ U.K.	18.0	13.1	9.6	9.4	9.7	9.6
„ U.S.A.	5.9	4.5	2.7	1.7	1.9	3.1
„ Total	50.7	36.0	26.1	29.9	28.6	30.3
APPAREL (<i>including boots and shoes</i>)						
From Japan . . .	4.8	8.6	6.9	5.7	3.0	3.5
„ U.K.	8.2	4.5	3.0	3.0	2.1	2.0
„ Germany . . .	2.4	1.5	0.8	1.0	0.8	0.6
„ France	3.7	2.2	0.7	1.0	0.6	0.4
„ U.S.A.	2.6	1.2	1.0	0.7	0.7	0.8
„ Total	25.9	19.9	14.7	13.6	8.3	8.3
BICYCLES						
From Japan . . .	0.6	1.1	1.2	1.9	1.7	1.9
„ U.K.	9.7	4.8	4.3	5.2	6.0	6.9
„ Total	11.9	7.2	6.5	8.1	8.4	9.8
ALL IMPORTS						
From Japan . . .	235.9	145.1	133.4	205.0	164.4	196.8
„ U.K.	1,031.0	612.9	448.1	487.7	475.3	511.7
„ Total	2,408.0	1,647.9	1,263.7	1,325.8	1,160.4	1,264.3

TABLE X. *Japanese Exports to Great Britain*

(In million yen)

	1929	1930	1931	1932	1933	1934*
Tinned and bottled foods .	5.5	4.9	4.6	6.1	13.1	5.2
Raw silk	4.1	2.9	6.2	9.3	14.7	7.2
Boots and shoes . . . .	..	0.1	2.3	4.1	3.7	..
Buttons	0.8	1.0	0.9	1.3	1.6	1.0
Pottery	0.5	0.7	0.7	0.8	1.3	0.6
Wood	2.3	2.0	1.4	2.9	3.8	1.8
Lamps	0.4	0.6	0.8	1.8	2.9	..
Toys	1.4	1.7	2.1	2.3	4.1	2.7

* Six months.

TABLE XI. *Japanese Exports to Australia*

(In million yen)

	1929	1930	1931	1932	1933	1934†
Silk tissues	26.3	13.6	8.7	13.7	10.8	7.9
Cotton tissues	2.9	2.4	2.9	4.9	10.0	12.1
Rayon tissues . . . . .	..*	0.2	0.6	2.9	9.1	13.1
Toys	0.5	0.4	0.2	0.9	1.8	1.6
Glass and glassware . .	0.6	0.3	0.1	0.4	0.8	0.6
Straw plaits	0.1	0.1	..	0.2	0.3	0.3
Cotton towels	0.2	0.2	0.2	0.4	0.7	0.6
Lamps	0.1	0.1	0.2	0.4	0.6	0.5
Pottery	1.2	0.8	0.7	1.8	2.7	1.9

* Not available, rayon included with silk.

† Jan.-Oct.

TABLE XII. *Imports of Cotton and Rayon textiles into Nigeria in 1934* (In thousand square yards)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
RAYON PIECE-GOODS												
U.K.	109	55	33	14	14	27	57	58	56	71	104	258
Japan	463	817	573	1,007	156	138	312	84	28	..	257	15
COTTON PIECE-GOODS												
<i>Bleached</i>												
U.K.	894	1,281	1,452	922	543	725	889	772	1,243	1,084	1,710	2,136
Japan	1,894	813	593	1,559	429	261	85	63	53	26	132	..
<i>Coloured</i>												
U.K.	479	412	473	271	306	299	409	519	422	561	695	1,146
Japan	1,300	1,394	369	469	240	7	169	15	57	17	179	86
<i>Dyed</i>												
U.K.	458	333	373	260	315	291	259	327	287	350	329	572
Japan	529	70	30	31	62	3	2	..	..	..	..	6
<i>Grey Bafts</i>												
U.K.	193	235	453	315	332	489	474	608	560	385	828	714
Japan	718	123	1,037	577	27	49	79	..	..	..	..	..
<i>Other grey</i>												
U.K.	60	52	48	50	82	54	59	110	69	102	95	149
Japan	388	9	..	80	..	..	..	..	..	..	..	..
<i>Printed</i>												
U.K.	568	543	678	337	458	320	371	534	553	778	900	1,344
Japan	367	352	410	311	145	31	40	65	..	..	38	58

NOTE: The Japanese quota for the period May 7th-Dec. 31st, 1934, was fixed at 1,524,503 square yards, including Grey, Bleached, Printed, Coloured and Dyed Cottons, Velveteen, and Artificial Silk.

TABLE XIII. *Imports of Rayon Piece-goods into Jamaica during 1934* (In thousand square yards)

	U.K.	Japan	U.K. Proportion of total
			Per cent.
January .	2	246	0.8
February .	..	263	..
March .	8	440	1.8
April .	3	509	0.6
May .	9	564	1.5
June .	9	193	4.0
July .	20	13	37.7
August .	44	11	50.0
September .	73	8	71.6
October* .	14	46	10.5
November .	138	23	58.2
December .	147	12	78.2

* The break in the trend in October may be due to large Japanese shipments in excess of the quota imported on payment of a heavy additional duty.

TABLE XIV. *Imports of British and Japanese Cotton Textiles into the British Colonial Empire*

	Quantities (million yards)			Index of Quantities (1929 = 100)			Distribution (per cent.)		
	Total	U.K.	Japan	Total	U.K.	Japan	U.K.	Japan	Others
<i>East African Markets¹</i>									
1929	109.4	23.6	32.6	100	100	100	21.6	29.8	48.6
1930	92.8	19.3	35.5	85	82	109	20.8	38.2	41.0
1931	96.5	13.0	50.5	88	55	155	14.1	52.4	33.5
1932	95.0	14.6	60.0	87	62	184	15.4	63.2	21.4
1933	104.0	11.7	78.2	90	50	240	11.3	75.2	13.5
<i>West African Markets²</i>	(a)	(a)	(a)						
1929	141.4	124.4	..	100	100	..	88.0	..	22.0
1930	143.2	126.4	..	101	102	..	88.2	..	21.8
1931	97.2	86.4	1.0	69	69	100 (c)	88.9	1.3	9.8
1932	176.5	159.6	4.4	124	128	440 (c)	90.5	2.5	7.0
1933	148.1	113.5	15.6	105	91	1,560 (c)	76.6	10.5	12.9
<i>Ceylon (b)</i>									
1929	56.9	27.5	8.2	100	100	100	48.4	14.4	37.2
1930	50.6	19.7	13.4	89	72	163	38.2	25.6	36.2
1931	54.9	16.0	23.7	96	58	289	29.2	43.2	27.6
1932	68.6	15.8	40.4	121	57	492	23.0	58.9	18.1
1933	60.7	9.6	41.4	107	35	505	15.8	68.2	16.0
<i>Malaya</i>									
1929	166.5	86.0	34.7	100	100	100	51.6	20.8	27.6
1930	118.0	32.1	56.3	71	37	162	27.2	47.7	25.1
1931	99.9	21.6	49.8	59	25	144	21.8	50.4	27.8
1932	150.0	39.1	85.8	90	45	247	26.1	57.3	16.6
1933	145.9	25.9	99.5	88	30	287	17.8	68.2	14.0
<i>West Indian Markets³</i>									
1929	41.1	21.9	..	100	100	..	53.3	..	46.7
1930	41.5	22.3	..	101	102	..	53.7	..	46.3
1931	40.9	20.9	0.2	99	96	100 (c)	51.1	0.5	48.4
1932	42.7	33.1	1.3	104	151	650 (c)	77.6	3.1	19.1
1933	43.5	28.0	10.2	106	128	5,100 (c)	64.4	23.5	12.1

¹ Kenya
Uganda
Nyasaland
Somaliland
Tanganyika
Zanzibar

² Gambia
Gold Coast
Nigeria
Sierra Leone

³ Barbados
Jamaica
Trinidad
Tobago
British Guiana

(a) West African imports
in million square yards.

(b). Comparable figures are available for Jan.-Nov. 1934, viz:
Imports. Total—74.4 mill. yds.
From U.K. — 9.7 (13%)
From Japan —52.7 (70.9%).

(c) 1931 = 100.

TABLE XV. *Tanganyika**Imports and Average Import Values of Cotton
Piece-goods*(Quantities in thousands yards; Average Import Values in £ per
thousand yards)

			1930	1931	1932	1933	1934
GREY:							
Total	Q	.	12,945	13,846	11,032	10,142	11,113
	V	.	15.2	12.7	11.1	10.2	
From India	Q	.	3,637	3,431	1,673	1,216	847
	V	.	16.9	15.0	14.1	13.3	
„ Japan	Q	.	8,961	10,084	9,226	8,846	10,136
	V	.	14.4	11.9	10.5	9.7	
BLEACHED:							
Total	Q	.	3,076	2,723	3,656	3,039	2,091
	V	.	23.1	16.3	10.3	11.7	
From U.K.	Q	.	1,236	528	445	418	176
	V	.	18.6	14.4	17.8	15.1	
„ India	Q	.	177	639	133	150	65
	V	.	26.2	9.3	24.1	16.5	
„ Holland	Q	.	929	603	322	163	48
	V	.	24.9	21.6	21.2	20.8	
„ Japan	Q	.	595	1,260	1,684	2,284	1,783
	V	.	15.4	12.7	10.7	9.9	
PRINTED (other than Kangas):							
Total	Q	.	1,907	1,444	3,682	3,865	5,019
	V	.	25.1	17.9	11.9	11.1	
From U.K.	Q	.	374	198	344	62	117
	V	.	31.4	26.9	26.6	30.0	
„ Germany	Q	.	259	39	16	11	2
	V	.	39.1	31.8	25.0	40.6	
„ Holland	Q	.	200	91	30	7	1
	V	.	33.8	31.2	25.6	21.8	
„ Italy	Q	.	148	143	73	21	1.5
	V	.	30.4	25.8	25.7	22.6	
„ Japan	Q	.	837	946	3,136	3,737	4,699
	V	.	14.7	12.2	9.7	10.5	
PRINTED KANGAS:							
Total	Q	.	3,515	2,105	2,538	2,376	2,354
	V	.	30.1*	25.3	22.9	21.4	
From U.K.	Q	.	2,359	1,231	1,969	1,735	1,630
	V	.	29.4	24.9	22.8	20.9	
„ Holland	Q	.	1,124	866	557	607	505
	V	.	31.4	25.6	23.1	22.8	
„ Japan	Q	.	..	..	..	15	205

TABLE XV (cont.):

				1930	1931	1932	1933	1934
PIECE DYED:								
Total	Q	.	.	7,243	7,644	9,625	11,872	11,461
	V	.	.	25.0	18.5	14.0	12.8	
From U.K.	Q	.	.	2,111	1,446	1,701	994	741
	V	.	.	32.4	27.8	23.2	27.7	
„ India	Q	.	.	2,965	3,589	2,152	677	115
	V	.	.	18.3	15.9	15.5	15.1	
„ Germany	Q	.	.	173	98	27	13	6
	V	.	.	34.7	29.8	26.2	27.8	
„ Holland	Q	.	.	1,522	743	223	62	37
	V	.	.	26.5	22.2	21.8	22.3	
„ Italy	Q	.	.	182	190	48	18	6
	V	.	.	36.0	25.1	30.3	37.9	
„ Japan	Q	.	.	253	1,564	5,461	10,101	10,555
	V	.	.	16.2	12.1	10.0	11.1	
YARN DYED:								
Total	Q	.	.	4,284	3,188	3,711	4,727	6,576
	V	.	.	23.6	16.7	14.2	12.3	
From U.K.	Q	.	.	383	131	157	89	88
	V	.	.	31.0	25.5	27.0	28.5	
„ India	Q	.	.	802	721	580	528	318
	V	.	.	23.2	20.9	17.7	18.5	
„ Germany	Q	.	.	115	31	48	45	27
	V	.	.	30.0	74.3	27.4	20.4	
„ Holland	Q	.	.	1,447	541	423	368	315
	V	.	.	30.7	25.3	26.4	24.9	
„ Japan	Q	.	.	1,387	1,668	2,378	3,568	5,704
	V	.	.	12.9	10.7	9.1	9.0	

TABLE XVI. *Palestine**Imports and Average Import Values of Cotton Piece-goods*

(Quantities in thousand kilos; Average Import Values in £ per 100 kilos)

					1931	1932	1933
GREY:							
Total	Q	.	.	.	804.6	717.1	799.5
	V	.	.	.	8.0	7.6	7.2
From U.K.	Q	.	.	.	111.1	12.1	33.4
	V	.	.	.	9.1	9.5	12.6
„ Egypt	Q	.	.	.	670.3	274.5	16.4
	V	.	.	.	8.0	7.5	7.1
„ Japan	Q	.	.	.	103.8	424.5	747.8
	V	.	.	.	7.9	7.4	7.0
BLEACHED:							
Total	Q	.	.	.	334.3	425.8	497.5
	V	.	.	.	17.2	15.6	14.0
From U.K.	Q	.	.	.	226.0	249.9	174.7
	V	.	.	.	16.4	16.6	18.0
„ Italy	Q	.	.	.	28.0	53.1	60.8
	V	.	.	.	10.4	14.7	15.0
„ Egypt	Q	.	.	.	33.6	26.3	29.4
	V	.	.	.	14.8	11.7	9.8
„ Syria	Q	.	.	.	21.9	72.6	209.2
	V	.	.	.	24.2	10.3	9.6
PRINTED AND DYED:							
Total	Q	.	.	.	1,316.3	1,472.1	1,720.6
	V	.	.	.	18.0	17.8	16.4
From U.K.	Q	.	.	.	156.9	281.1	280.4
	V	.	.	.	22.1	22.4	21.6
„ Belgium	Q	.	.	.	..	37.4	43.8
	V	.	.	.	..	18.2	17.6
„ Czechoslovakia	Q	.	.	.	39.1	24.4	33.6
	V	.	.	.	28.0	33.0	33.4
„ Germany	Q	.	.	.	..	24.7	37.7
	V	.	.	.	..	30.3	29.7
„ Italy	Q	.	.	.	346.0	344.7	290.5
	V	.	.	.	17.4	17.6	18.3
„ Egypt	Q	.	.	.	367.6	215.3	69.3
	V	.	.	.	11.8	12.8	14.1
„ Japan	Q	.	.	.	38.6	324.1	794.4
	V	.	.	.	12.8	11.3	11.5
„ Syria	Q	.	.	.	277.4	195.7	116.9
	V	.	.	.	21.8	21.8	19.9

TABLE XVII. *Piece-goods Exports of Cotton and Rayon*¹
(In million square yards)

	1932	1933	1934
JAPAN:			
Cotton . . .	2,031.7	2,090.2	2,577.2
Rayon . . .	241.7	260.1	345.7
UNITED KINGDOM:			
Cotton . . .	2,198.0	2,031.1	1,995.3
Rayon . . .	10.6	10.9	16.0
Mixtures . . .	44.3	42.9	48.5
ITALY:			
Cotton . . .	339.9	289.5	226.4*
Rayon . . .	28.8	30.7	33.1*
Mixtures . . .	49.4	40.9	26.5*
FRANCE:			
Cotton . . .	341.9	380.2	346.1*
Rayon . . .	66.3	58.3	42.2*
GERMANY:			
Cotton . . .	80.4	72.8	69.3
Rayon . . .	14.4	18.4	17.1
Mixtures . . .	13.0	13.7	9.4
SWITZERLAND:			
Cotton . . .	29.7	27.2	27.8
Rayon . . .	5.5	5.5	4.3
Mixtures . . .	1.4	1.0	0.6
HOLLAND:			
Cotton . . .	119.1	76.6	90.4
Rayon . . .	0.7	1.5	0.9
Mixtures . . .	1.1	0.6	0.4
CZECHOSLOVAKIA:			
Cotton . . .	103.1	71.0	62.2
Rayon . . .	6.2	5.0	6.7
UNITED STATES:			
Cotton . . .	375.4	302.0	227.1*
Rayon . . .	3.3	2.8	3.0*
Mixtures . . .	2.8	1.5	1.3*

* Estimate on first eleven months.

¹ *Manchester Guardian*, March 4th, 1935.

TABLE XVIII. *Japanese Rayon Piece-goods Exports by destination*¹

(In million square yards)

	1931	1932	1933	1934
Total	139.5	247.1	260.1	345.7
China, Manchuria, and Kwantung	5.3	1.5	6.9	18.6
India and Ceylon	61.4	92.6	62.0	76.3
Malaya	7.4	8.5	11.6	10.7
Dutch East Indies	27.4	59.5	60.8	46.7
Philippines	8.2	6.7	2.9	6.1
Egypt	3.2	19.8	16.2	26.6
South Africa	9.5	12.2	9.7	13.8
East Africa	2.6	5.1	2.9	3.9
Rest of Africa	0.6	8.6	21.8	23.9
Central and South America	1.2	4.8	14.6	34.1
Australia	1.3	8.3	21.2	43.0
Other countries	11.4	14.1	29.5	42.0

¹ *Manchester Guardian*, March 4th, 1935.TABLE XIX. *Japanese Goods in South America*I. *Exports of Cotton Tissues to S. America by Japan, Great Britain, and the U.S.A.*

(In million square yards)

	1931	1932	1933	Jan.-Nov. 1934
GREY:				
From Japan	8.4	8.9	19.0	33.9*
„ U.K.	8.4	10.0	15.0	18.8
„ U.S.A.	28.2	21.7	†	†
BLEACHED:				
From Japan	0.9	4.9	8.7	10.9*
„ U.K.	49.3	48.6	66.5	60.7
„ U.S.A.	7.0	5.6	†	†
COLOURED:				
From Japan	7.6	14.6	30.3	48.0*
„ U.K.	116.8	145.3	187.5	179.2
„ U.S.A.	38.6	35.8	†	†

* Argentine, Chile, and Uruguay only.

† Not available.

TABLE XX

II. *Japanese Exports to S. America*

(In thousands of yen)

	1931	1932	1933	<i>Jan.-Nov.</i> 1934
Cotton tissues . . .	2,249	4,116	10,903	18,844*
Silk tissues . . .	3,209	2,699	3,960	1,859†
Rayon tissues . . .	242	565	2,002	3,469†
Lamps and parts . . .	145	981	1,361	..
Pottery . . .	390	354	1,054	1,059‡
Buttons . . .	422	550	739	599‡
Toys . . .	318	259	600	385‡
Machinery and parts . .	48	99	333	124§
Bed cloths (sheets?) . .	63	51	173	..
Cotton towels . . .	59	41	139	..
Total, including others .	10,225	13,133	30,379	53,765

* Argentina, Uruguay, and Chile only.

† Argentina and Uruguay only.

‡ Argentina and Brazil only.

§ Brazil only.

CHAPTER II

JAPAN

§ I. BRIEF HISTORY OF JAPANESE INDUSTRIALIZATION

THE social and political conditions in which modern industry took birth were radically different in Japan and in China.

While in China trade and industry had always played a normal unimpeded role in the social life of the country, in Japan they were rigidly circumscribed by a highly developed feudal system which ordered the lives of the peasants and kept the merchant classes in a state of subjection. In the days before the revolution of the eighteenth century the economic life of the country was shaped to the needs of the ruling classes, who despised mercantile pursuits and treated trade and industry mainly as instruments for supplementing their revenues. The result was an artificial system of licensed and restricted trading corporations, combined with a feeble development of industry limited for the most part to the special crafts which ministered to the personal needs of the Samurai class.

Japan, like China, made but small use of iron for general purposes and a great many objects of common use were fashioned of wood, making it possible for the ordinary farmer to fill the place of the more specialized artisan. Even the pottery industry was so little organized that domestic requirements were mostly met by manufacture in the villages themselves.

The Japanese steel of the Shogunate days was famous for its quality, but its use was extremely limited and it was chiefly worked into swords, armour, and objects of ornament. Copper, in which Japan is especially rich and which was produced (and exported) in large quantities, provided a more important object of industry, being used generously in temple buildings, &c., as well as for the regional coinages. The people spun and wove their own cotton, partly

from locally grown supplies, the cotton plant having been introduced into Japan during the sixteenth century. The technique of silk weaving was already highly developed and silk goods were made in considerable quantities for the upper classes, but the bulk of the population, even when not precluded by the laws of the period from weaving silken apparel, were too poor to afford it.

Industry in Japan at the end of the feudal period was, in short, so backward that, according to the dictum of the author of a penetrating study of Japanese economic progress,¹ an analogy with the industrial history of England would have to be sought not in the eighteenth but in the sixteenth century.

Japan's foreign trade, such as it was during the 'closed' period, was artificial rather than natural in character, being a State monopoly directly controlled by the Shogun and the *daimyos*. It consisted mainly of the exchange of goods—copper and fishery products being the chief exports—with western Pacific countries, Korea, China, Indo-China, and the Philippines. Even the Dutch traders who, before the opening of Japan, had been allowed to maintain a single trading station on Japanese soil, had trafficked in eastern rather than European merchandise.

This stunted economic development had as its consequence a much weaker resistance in Japan than in China to the invasion of Western commercial enterprise when this eventually occurred after the breaking down of the barriers which for centuries had excluded the foreigner from contact with the Japanese people. The economic revolution which accompanied the Restoration of 1868 was in point of fact so thorough and drastic that the gulf between industrial conditions in Japan and the West was largely bridged within the next half-century. The social reorganization of the country which followed the revolution allowed of the energies and resources, not only of the national government, but also of the ultra-conservative feudal aristocracy being diverted into industrial channels. Manufacture and trade were freed from monopoly and

¹ Orchard, *Japan's Economic Position*, 1930.

privilege, the wealth of the Samurai families was applied to financing business, the currency system of the country was restored from chaos to order, and the Government of the country laid the foundations of railways, shipping, banks, and mining and manufacturing enterprises. Western science and experience were enlisted to assist in the persons of foreign experts and through technical training of Japanese students abroad.

The first two decades after the revolution were occupied in this preparatory work, the Government itself being the author of all major enterprises which included *inter alia* the establishment of cotton-spinning, wool-weaving, cement and glass factories. The very necessary reorganization of the currency was undertaken at an early stage by the founding of the Bank of Japan in 1882 and its investment with the sole right of note-issue; for the financing of foreign trade the Yokohama Specie Bank was brought into being five years later.

The successful war with China of 1894 gave a pronounced stimulus to industrial development by creating a sudden and pressing demand for the wholesale production of a number of essential commodities, while the large cash indemnity imposed upon China further benefited industry by affording the opportunity of establishing the national currency on the basis of gold. The war was followed by the transient trade boom normal in such circumstances. This involved a further extension of the range of manufactures prominent among which were ship-building and the first essays in chemical manufacture, chiefly in the form of fertilizers.

The earlier industries set up by the Government were now sufficiently established for it to be able to hand over the majority to private management while continuing to give assistance in the form of subsidies.

By the turn of the century a change began to show itself in the composition of Japan's foreign export trade, which till then had consisted mainly of natural commodities¹ and

¹ Principally raw silk (the preparation of which implies, it need hardly be said, skilful manipulation) and tea.

traditional types of hand-made articles. It now included a markedly higher proportion of factory products. As a broad indication of the growth of Japanese trade at this stage of development it may be stated that, comparing the decades immediately preceding and immediately following the date of the Sino-Japanese war, imports increased six times, measured by value, and four times, measured by volume, exports five times and three times respectively, while company capital quadrupled.

✓ The Russo-Japanese War which occurred ten years after the war with China had similar and even more marked effects on industrial development. Military requirements, this time on a far greater scale, again brought about an important expansion of manufactures both in kind and quantity. The metal industries felt the stimulus particularly, and in the trade-boom years following the war shipbuilding and the manufacture of machinery and electrical equipment advanced rapidly; rubber and glass goods also entered the field of Japanese manufactures. In the same period Japan developed her characteristic export trade in small articles of everyday household use, such as buttons, matches, toys, and low-priced china-ware, the production of which at highly competitive prices was made possible by the abundance and dexterity of Japanese manual workers.

✓ This industrial expansion following the war of 1904-5 was made possible financially by a large inflow of foreign capital. The war itself had strained Japan's own financial resources to the limit, but its successful conclusion and the enhanced international status of Japan opened foreign financial markets to Japanese borrowing. The Government's foreign loans, which prior to 1905 had aggregated only £13 million, increased by £107 million in the course of the next two years, and a large part of the funds obtained in these and subsequent years was applied to the promotion of industry. In the same two years, that is 1905 and 1906, private companies and municipal bodies raised between £60 million and £70 million from foreign sources. Another powerful aid to industry, resulting indirectly from Japan's

increased international prestige, was the abolition of the old conventional tariff and freedom for the Government to impose protective duties.

Of Japanese industries the textile industry is by far the most important both intrinsically and from the special view-point of the present study. Apart from the later introduction of rayon, the spinning and weaving of silk and cotton are the sides of the industry which concern us most, and the general story of Japan's industrialization must be interrupted here in order to follow their development.

The silk industry as a whole—that is to say the rearing of silk-worms, the reeling of the thread from the cocoon and the weaving of silk cloth—has been Japan's major export industry throughout the modern period. At the beginning of the period, in 1868, silk products constituted two-thirds of her total exports. As compared with cotton, silk manufacture has retained much of its character as a hand industry, and although 20 per cent. of all the factory workers in Japan are at present engaged in steam-filatures, the greater part of the reeling is still done by hand by the rural population. The bulk of Japanese silk is exported 'raw' and silk weaving is of relatively minor importance. The product in either case is in far less vital competition with the products of Western industry than in the case of cotton.

The cotton industry is the second largest contributor to Japan's export trade, accounting nowadays for approximately 20 per cent. of her total exports.

Cotton spinning by machinery began in Japan before the opening of the country to foreign trade, a spinning mill equipped with English plant having been set up about 1860 by the head of the Satsuma clan. During the first years of the new régime several more mills were erected or financed by the Government. The growth of mills continued during the 1880's and 1890's at which early period there was founded the Japanese Cotton Spinners' Association, now one of the most influential manufacturers' organizations in Japan. By 1890 imports and the local manufacture of yarn stood at the same level; a decade later Japan was manufacturing twenty times as much as

she imported. Towards the end of the century Japanese production of yarn had out-stripped the home demand, and one-third of the output was being exported from the country—to a value of about 30 million yen.

In the home market the yarn was chiefly absorbed by the hand looms, which held the field in weaving until well into the new century. It was only, in fact, in 1923-4 that the cotton power looms of Japan caught up with the hand looms in number and even to-day the latter produce a substantial proportion of the cloth used in Japan.¹ As Mr. J. E. Orchard remarks:

“The Japanese government recognized that the changes in cotton weaving were to be much less radical than those in spinning (where the difference in the individual worker's output between “power” and “hand” is very much more pronounced), for government assistance has not been extended to the weaving industry to the same degree.”²

✓ The weaving of cotton piece-goods was, judged by export values, of less importance than the spinning of yarn till the time of the Great War. The opening up of a large market in Korea after its acquisition by Japan and the growing demand for cotton cloth in China greatly assisted, however, the development of the piece-goods industry, and the value of exported piece-goods rose from 9 million yen in 1903 to 46 million yen in 1914, during which period the value of exported yarn had increased from 31 to 73 million yen.

✓ During the thirty-five years from the Restoration to the beginning of the Great War Japan had thus taken a long step towards industrialization of the Western type. She had also freed herself almost completely from foreign control and management, whether in the shape of an imposed conventional tariff, of foreign instructors, or of the foreign merchants monopoly in the handling of the import and

¹ The type of cotton cloth used for domestic purposes in Japan is different from that manufactured for export especially in regard to width, the kimono cloth being particularly narrow.

² Orchard, op. cit.

export trade. Her Government had shown itself determined to create national independence, as far as conditions allowed, in essential industries and, by the fostering of new enterprises, to bring Japan into the ranks of the great industrial countries, with a special concentration on textiles. As an exporter of manufactured goods Japan looked mainly to the Asiatic and North American mainlands, the U.S.A. taking the bulk of her silk and China absorbing over 90 per cent. of her cotton products. In the Chinese market for cotton yarn she had taken the place of India, leaving England to the more or less unchallenged enjoyment of the minor trade in yarns of the finer counts.

A new chapter opened with the Great European War. The war created for Japan an enormous market for war necessities of all sorts, both in goods and services, gave to her, by its crippling effect on shipping on the ocean trade routes, an overwhelming advantage in the neighbouring Western Pacific markets, and opened to her fresh markets farther afield. The new markets into which she now penetrated for the first time, or in which she greatly strengthened her previous footing, comprised India, the Netherlands East Indies, South America, many regions of Africa and, to a lesser extent, European countries. A few comparative figures will illustrate the development which took place during the war period in Japanese industry. For industry in general the following percentages of increase were recorded: number of factory workers 63 per cent., units of industrial power 34 per cent., electric motor capacity 206 per cent.; in the cotton industry the number of spindles increased by 44 per cent., the output of yarn by 55 per cent., the steel and iron industry, thrown on its own resources, developed still more rapidly, the output of pig iron rising by 143 per cent. and that of the principal steel products by 116 per cent.; during the War private iron and steel plants came into existence with aggregate productive power approximately equal to that of the Imperial Steel Works which had formerly supplied 70 to 80 per cent. of the home production. A most important development occurred in the chemical industry in its applications particularly

to dye-stuffs, soda, the manufacture of artificial silk, and the extraction of atmospheric nitrogen.

Foreign trade reflected the effect of the War in an increase in value of exports between 1913 and 1918 from 632 million to 1,962 million yen and of imports from 729 million to 1,668 million yen.¹ While Japan's trade with Europe decreased roughly by 10 per cent., her trade with Asiatic countries increased 78 per cent., with North America 427 per cent. and with Africa 385 per cent. The major development was on the export side and resulted in a total excess of exports, taking the war period as a whole, of nearly $1\frac{1}{2}$ milliards of yen. An equal amount was contributed to the credit side of Japan's international account by her invisible exports and though the whole of this vast reserve was used up—largely in the capital improvements of which mention will come later—in the course of the next six years, it served to ease the shock of the severe economic crisis which befell Japan in 1920-1 to be followed by the earthquake disaster of two years later.

In the opinion of Professor G. C. Allen of Liverpool University the main stimulus which so enormously multiplied Japan's exports during the war period was the financial policy of the Government. The reaction between finance and the export trade is thus described by him in an article in the Supplement to the *Economic Journal* for January 1933:

✓ 'The huge export surplus would normally have led to a gold drain to Japan. But owing to the embargoes on gold exports during the War, the yen rose high above par. Consequently, the Yokohama Specie Bank could not transmit the proceeds of its export bills to Japan, and, therefore, it found difficulty in maintaining advances to exporters. The Bank of Japan and the Government, however, desirous of facilitating exports, purchased the exchange banks' balances which had accumulated in New York and so provided funds for additional advances. As a result of these transactions the note-issue rose rapidly, prices increased, and further industrial growth was stimulated. The end of the boom in 1920 found Japan far

¹ These figures must be read keeping in mind the rise in world prices which probably doubled the gold value of Japan's foreign trade on the basis of pre-war prices.

more industrialized than in 1914, a creditor instead of a debtor country, and with short-term balances abroad amounting to over 1,300 million yen. Her domestic gold reserves had also greatly increased.'

In the cotton manufacturing industry the effect of the war period on output was, as we have seen, considerable; of particular importance was its effect on the export trade and on the organization of the industry. As regards the former, the volume-increase in foreign ships, achieved partly at the expense of a restriction of home sales, was calculated at 75 per cent.¹ over the whole range of cotton goods. It is noteworthy that the proportion of woven cloth to yarn among the exports became very much higher than before the War. 'The enlargement of the production of cotton cloth for export constituted, in fact,' to quote the Report of the U.S. Tariff Commission, 'the most permanent development that has come to the Japanese industry out of the war.'

This export expansion was mainly in pre-war markets, the sales in the newly won war markets showing a falling-off once the abnormal conditions created by the War had ceased. The loss of these higher-grade markets is explained by the fact that the quality of the Japanese cotton goods, though improved, was still at a very low level compared with European and American manufactures and that the industry as a whole remained well behind the West in the matter of technical advance. On this subject the U.S. 1921 report already quoted remarks:

'The facilities and skill necessary to spin other than coarse yarns, to weave cloths beyond the plain unbleached staples, to carry these and lighter fabrics beyond the crude woven stage by the various finishing processes, or to turn out satisfactory wearing apparel or other finished articles of cotton, have not been developed in Japan to any considerable extent.'

General improvement was nevertheless very marked as soon as the immediate post-war slump had passed. The cotton industry, to quote from a report issued by the

¹ *The Japanese Cotton Industry and Trade* issued by the United States Tariff Commission in 1921.

British Department of Overseas Trade in 1927¹ was, apart from silk,

'the only one of Japan's industries which has, on the whole, emerged unweakened from the post-war period, a fact which may be ascribed to three causes, namely, the natural suitability of the country for an extension of the industry, the excellent manner in which the industry is organized and managed, and the strong foundations established in the course of the past quarter of a century.'

The sound position of the industry was largely due to measures of reorganization and rationalization made possible by the use of profits accumulated during the prosperous years of the War, when the net profits of the Japanese mills increased on an average fourfold. At the height of prosperity the spinning companies every half-year were earning profits equal almost to 40 per cent. of their paid-up capital.² This prosperity was turned to account to strengthen the foundations of the whole cotton industry. Capital values were written down, the company members of the Spinners' Association alone reducing theirs by 10,805,000 yen,³ while the aggregate reserves of the companies were increased to five times the pre-war total. With the help of accumulated funds 'rationalization' measures, consisting of amalgamations of interests and the co-ordination of industrial processes, were taken in hand. This was made easier by the large size of the Japanese manufacturing units and their concentration in the hands of a small number of capitalists. The degree of concentration can be judged by the fact that in 1925 the number of cotton spinning companies was sixty-five, of which all but eleven were members of the Association, and that the Association itself controlled more than 90 per cent. of the machinery and of the paid-up capital.⁴ At a later date it was estimated that 40 per cent. of the total trade in cotton goods was under the control of

¹ *Report on the Cotton Spinning and Weaving Industry in Japan, 1925-6*, by W. B. Cunningham.

² Ibid.

³ Ibid.

⁴ Asari, *Development of Japanese Cotton Spinning Industry, 1931*. The firms referred to are: Mitsui, Mitsubishi, Yasuda, and Sumitomo.

four of the great firms¹ and that three firms alone controlled 70-80 per cent. of the import of raw cotton and of the export of cotton piece-goods.²

A notable post-war development which affected Japanese industry as a whole was the electrification of factories. Between 1921 and 1925 the generation of electric power in Japan was doubled, though this was only the beginning of a process which has raised Japan at the present time to the position of the third largest producer of electric power among all countries, bringing her approximately to the level of Great Britain, Canada, or the U.S.S.R. in regard to the distribution of electric power. ✓

1919 had been the 'peak' year for Japanese industrial output and export trade. After the post-war slump, in 1925, the curve of prosperity rose again to a high point, only slightly below that of 1919. In the following year fresh financial difficulties made their appearance and led to a crisis of the first magnitude which developed in 1927. This crisis, which was largely a legacy of the war boom, being due to the large number of financially unsound undertakings which had avoided liquidation till this date, caused the adoption of a belated policy of economy and retrenchment necessitating restrictions on factory output. Another more permanent result was the tightening of Government control of industrial organizations which matured in 1931 into the 'Staple Industries Control Act', designed to eliminate wasteful competition and to promote, support, and supervise industrial cartels. These measures of Government control are dealt with in detail in the following section of this chapter.

Reviewing the position of Japanese industry at the time of the 1927 crisis and of the subsequent 'readjustments', we find the textile industry thoroughly established as the premier industry of Japan contributing 2,676,000,000 yen to a total output value of 6,947,000,000 yen, i.e. practically 40 per cent. of the whole,³ with the manufacture

¹ Ibid.

² Ellinger, *Japan's Competition in the Cotton Trade* (Paper read before the Royal Statistical Society in 1930).

³ The present ratio is about 37 per cent.

of food products next on the list, followed by the chemical industry and 'machinery and tools'. The largest item within the textile industry remained, as always, the preparation of raw silk. In the category of 'wholly manufactured' goods—factory products for the most part—cotton woven goods accounted for nearly one-half. In regard to the cotton industry, Japan's progress from the primary stage of spinning yarn for export to the secondary and more advanced stage of applying factory methods to weaving, and of exporting the finished, instead of the 'half-finished', article can be illustrated by the following brief table showing the approximate percentages which yarn and cloth have respectively borne in Japan's total export of cotton manufactures of all categories measured by value:

	1913	1920	1925	1932	1933	1934 (half year)
	
Yarn . . .	50	28	20	8	4	4
Cloth . . .	30	63	72	85	88	88

A branch of the cotton industry which has developed greatly on the export side in recent years is the manufacture of cotton and mixed-cotton hosiery. The products of this industry go to many markets, and the case of imports of Japanese hosiery articles into Great Britain may be taken as symptomatic. Between 1924 and 1933 their sale in the United Kingdom increased fourfold from 381,000 to 1,620,000 dozens, and the lowness of prices has been such that, according to a statement by the Secretary of the British Hosiery Manufacturers' Federation, it could not be achieved by the British manufacturer 'even if he got his material for nothing'.¹

Supreme as the silk and cotton industries still were in Japanese foreign trade, there were already signs of a challenge to their paramountcy by the rayon industry, manufacturing yarn and materials of rayon or of mixed-rayon composition. This industry was started in Japan in 1918, assumed important proportions about 1927, and has since made spectacular advance. In 1930 rayon tissues

¹ See *The Times* of March 1st, 1935.

suddenly appeared as a major item among Japan's exports; by 1932 she had attained her present position as the foremost rayon-exporting country of the world—she exports at present nearly 60 per cent. of her output of rayon yarn and textiles combined—and as a producer of rayon she now ranks second only to the United States with a production for 1934 provisionally estimated at 154 million lb., a figure comparing with 89 million lb. for Great Britain.¹

The effect of the Great War in bringing about an abnormal expansion of the heavy industries in Japan, of which mention has already been made, was followed by a strong reaction, and up to the time of the world crisis the Japanese metal industries as a whole, handicapped as they were by local deficiency of necessary raw materials and by the lack of technicians and skilled workers, made very slow advance, and were only kept alive by means of Government assistance.

Since 1931 a combination of circumstances consisting of the Japanese abandonment of the gold standard, the opening up of Manchuria to Japanese development—especially in regard to railways—and the expansion of naval and military armaments, has radically changed the position temporarily at least; the industries have revived and are now among the most prosperous in the country.

The output of iron and steel and their products has increased very greatly, as the figures given on p. 58 show.

It will be seen from these figures that since 1931 iron and steel production have nearly or quite doubled, while the percentage rise in steel products (plates, bars, &c.) was 25, 34, and 90 in 1932, 1933, and 1934 respectively. Corresponding figures for steel manufactures are not available, but there is good evidence of a similar expansion. Related to world output Japan's production of iron and steel has mounted from 1·8 per cent. in 1928 to 4·1 per cent. in 1933. In steel alone Japan now supplies 90 per cent. of her requirements, an increase of 10 per cent. since 1930.

For the raw material of iron and steel manufacture Japan,

¹ For further details of the rayon industry see section 2 of this chapter.

as will be shown later, depends largely on foreign imports. Prior to 1932 she imported 91 per cent. of her iron ore, 37 per cent. of her pig-iron, and 20 per cent. of her steel. Hence the recent expansion in the heavy industries has,

Production of Iron and Steel¹

(In thousand metric tons)

	<i>Pig iron*</i>	<i>Steel ingots and blooms</i>	<i>Steel products</i>
1925 . . .	921	1,300	963
1926 . . .	1,123	1,506	1,180
1927 . . .	1,269	1,685	1,336
1928 . . .	1,523	1,906	1,624
1929 . . .	1,536	2,294	1,928
1930 . . .	1,662	2,289	1,837
1931 . . .	1,407	1,883	1,602
1932 . . .	1,541	2,398	2,010
1933 . . .	2,019	3,201	2,689
1934 . . .	2,400†	3,800†	5,100†
First nine months:			
1933 . . .	1,459	2,228	1,179
1934 . . .	1,755	2,704	2,245

* Includes Korea and Manchukuo.

† Estimated.

naturally, been accompanied by increasing imports of the prime products from abroad. In the case of iron ore, the increase has only occurred since the end of 1933. Of the million and a half tons which Japan has, on the average, been importing annually, about 60 per cent. has come from the Straits Settlements and 40 per cent. from China. Meanwhile Manchurian production, most of which presumably finds its way to Japan, has slightly increased and now exceeds one million tons a year, while Korean production has similarly increased to over half a million tons. Manchuria and Korea have contributed substantially to the additional supplies of pig-iron imported, the percentage of the former having risen between 1931 and 1933 from 62 per cent. to 71 per cent., while those from British India have dropped

¹ This table, based on official figures compiled by the Tokyo Chamber of Commerce, is borrowed from the *Far Eastern Survey*, Jan. 30th, 1935, published by the American Council of the Institute of Pacific Relations.

from 38 per cent. to 27 per cent. Scrap iron, on which Japan largely depends, rose from 295,000 tons in 1931 to 1,270,000 in the first nine months of 1934, about one-half coming from the United States.

In the supply of steel products, Japan shows signs of increasing self-sufficiency. In spite of greatly expanded demand, her imports have recently dropped, the first six months of 1934 showing a decline of 33 per cent.¹ Imports of machinery, though showing an increase, have likewise not kept in step with the growth of demand, indicating that Japan is supplying her own needs to an increasing extent in this department also. This is made especially evident in the case of certain types which Japan has lately developed; for instance, between 1931 and 1933 there was a drop in imports of electrical machinery of 18 per cent., sewing machines and parts of 20 per cent., motor-cars and parts of 15 per cent. On the other hand, expansion of Japanese manufactures has been reflected in a greatly augmented demand for machine tools, the import of which rose by 429 per cent. from 1931 to 1933. The U.S.A. is still the leading source of Japanese machinery imports, having in the first half of 1934 supplied 31 per cent. of the total, while Germany increased her share to 28 per cent.

Meanwhile, Japan is beginning to figure as an exporter of steel goods (e.g. sheets and wire) and of machines. Exports of steel rose 212 per cent. from 1931 to 1933 (73,000 to 230,000 metric tons) while the first nine months of 1934 showed a further rise of 72 per cent. The greater part of the exports of steel (80 per cent.) were, however, accounted for by the development work in Manchuria; China took 10 per cent. leaving only 10 per cent. for other foreign customers. Machinery exports between the same two years rose 90 per cent. (from 13 million to 25 million yen). Spinning and weaving machinery contributed one-fifth and electrical machinery about one-tenth. Here again the bulk of the exports went to Manchuria and China, though other

¹ The sources of supply were in 1931: Germany 39 per cent., the U.S.A. 21 per cent., Great Britain 16 per cent., and Belgium 11 per cent., since when it appears the American share has risen.

buyers included British India, Russia, the Netherlands East Indies, Hong Kong, Brazil, and Australia.

The *Far Eastern Survey* for January 30th, 1935, from which the greater part of the information given above concerning the heavy industries has been taken, draws the following conclusions:

'Save for a few special products (for example, steel angles, channels, I-beams, and steel tubes) Japan appears to have very nearly realized, for the time being at least, its ambition of self-sufficiency. True, it must still import nearly all of its iron ore and more than one-quarter of its pig iron; but much of this comes from nearby sources now under its own control. In the case of machinery, domestic production has made great strides both quantitatively and qualitatively, but many observers think that for some time to come Japan will still find it cheaper to buy many types of engineering products abroad.'

A significant step of very recent date has been the establishment¹ in Calcutta of a joint Indo-Japanese iron and steel company with a capital of 5 million rupees. The machinery for the works has been ordered from Japan and the principal technical members of the staff will be Japanese.

Of the other Japanese industries which were in process of development before the world crisis and have lately become substantial competitors with those of the western manufacturing countries it will be sufficient to mention wool manufactures, glass, porcelain, small electrical apparatus, and rubber goods. The wool industry, which is chiefly occupied in the production of hosiery, muslins for Japanese women's native clothing, and, more recently, woollen clothes and serges, is in a state of rapid expansion. Output in thousands of yards between 1922 and 1932 increased as follows: muslins from 89 to 179, serges ('native') from 21 to 35, serges ('foreign style') from 2 to 26, cloth from 2 to 11.² The export of wool manufactures doubled between 1931 and 1933 (21 million and 42 million yen respectively). The woollen industry is largely a 'small shop' industry and the larger factories employ

¹ See *Japan Weekly Chronicle*, Commercial Supplement, Feb. 21st, 1935.

² Figures given in Bulletin No. 2 issued by the Tokyo Association for Liberty of Trading, 1934.

many home workers. An important feature of the wool manufacturing development is its influence on the Japan-Australia trade which will receive attention in a later chapter. Exports of wool yarn are very much on the increase and now exceed imports, India, Manchukuo, and China being the chief markets. Meanwhile imports from Great Britain—two-thirds of the whole—fell by some 30 per cent. between 1932 and 1933.

The growth of the glass industry in the last twenty years has been especially marked. In 1909 Japan was producing only 4 per cent. of her own requirements of sheet glass. She now stands third among producing countries, with an output amounting to one-seventh of the total world production.

A similar development is to be recorded in the porcelain industry where exports have risen from 19 million yen in 1931 to 35 in 1933.

In electrical apparatus the most striking figures are those relating to the export of electrical bulbs (largely of the smaller variety), the output year by year being as follows:

1923	.	.	.	13 millions.
1929	.	.	.	96 "
1930	.	.	.	101 "
1931	.	.	.	151 "
1932	.	.	.	273 "

Over the same period the selling price of bulbs has been reduced by nearly two-thirds.¹

Lastly, some further figures taken from the I.L.O. report will serve to show the progress in the exports of rubber goods:

(In millions of yen)

	<i>Shoes</i>	<i>Tyres</i>	<i>Toys</i>
1929 . . .	7	6	2
1930 . . .	6	5	2
1931 . . .	4	3	2
1932 . . .	4	4	5
1933 . . .	8	8	8

¹ Maurette, *Social Aspects of Industrial Development in Japan*, 1934 (International Labour Office).

The total value for 1933 marks, as will be seen from the above, an increase of 60 per cent. over that of 1929.

Reverting now to the record of industrial development generally, the check given to industry by the 1927 crisis proved temporary and lasted only while industries were adjusting themselves to the resultant fall in prices. The next two years saw no abnormal developments. The general industrial situation gradually improved, but output restrictions were maintained in force in most of the important industries and the employment figures showed little if any increase. Towards the end of 1929 the world economic depression began to make itself felt in Japan and Japanese industry was called on to face a fresh series of adversities beginning with the financial crash in the U.S.A.—her principal foreign customer—the sudden fall in silver, which crippled her exports to China, and later the effects of her own return in 1930 to the gold standard of currency.

Industrial recovery since the onset of world depression in 1929 has been more rapid in Japan than among any of her trade competitors. At no time did production fall below the 1928 level and a definite turning-point came in the second quarter of 1932. The annual rate can be seen in the following indices of industrial production and of volume of exports taken from the *League of Nations Monthly Bulletin of Statistics*.

	<i>Industrial Production</i>	<i>Quantum of Exports</i>
1928 . . .	100.0	100.0
1929 . . .	111.4	95.7
1930 . . .	105.6	96.5
1931 . . .	100.7	81.7
1932 . . .	107.9	91.9
1933 . . .	128.4	112.8
1934 . . .	141.7 (10 months)	126.7 (11 months)

The year 1934 saw substantial value increases over

1933 in the Japanese export of a number of competitive articles, namely:

Cotton yarn . . .	51 per cent.
Cotton cloth . . .	29 "
Rayon . . .	31 "
Glass goods . . .	21 "
Pottery . . .	18 "

The export of silk piece-goods meanwhile showed some recovery in response to a slight improvement in American demand, but raw silk exports remained at about three-quarters of the 1932 figure. Japanese exports as a whole showed a rise over the previous year of 16.7 per cent.¹ following upon a rise of just double that figure in 1933. The increase in imports which was greater than that of exports by approximately 2 per cent. was attributable mainly to increased imports of manufacturing raw material, those of raw cotton rising from 549 to 640 million yen and of wool from 132 million to 169 million, though machinery imports also rose by approximately 40 per cent. from 65 million to 90 million yen. Industrial investment also expanded, amounting to 1,031 million yen during the first ten months of 1934, an increase of 20 million yen over the corresponding period of 1933, nearly one-half of the new investment being absorbed by the chemical industry. Industrial profits have also increased, the net earnings of 1,000 selected companies rising from 242 million yen in the first half of 1933 to 279 million in the second half, and again to 300 million in the first six months of 1934.²

Annexed are tables showing, in concise form, the pro-

¹ According to Reuter's telegram published in *The Times* of July 23rd, 1935, Japanese exports for the first six months of 1935 measured by value show an increase of only 17 per cent. over the corresponding period of 1934, compared with increases of 21 per cent. and 49 per cent. in 1934 and 1933 respectively. The telegram goes on to state that the rate of increase has fallen so sharply since 1933 that industry in general in Japan believes that this may be the peak year of Japanese exports.

² Figures taken from the 'Commercial History, 1934', Supplement to *The Economist*, Feb. 16th, 1935.

gress of the Japanese cotton industry between 1919 and the present time:

Cotton Spinning

	<i>No. of ring spindles (in thousands)</i>	<i>Output in bales of yarn (in thousands)</i>
1919 . . .	3,435	1,921
1925 . . .	5,413	2,437
1929 . . .	6,795	2,791
1930 . . .	7,171	2,524
1931 . . .	7,498	2,567
1932 . . .	7,929	2,810
1933 . . .	8,173	3,100

Cotton Weaving

	<i>No. of looms (in thousands)</i>	<i>Output (in millions of yards)</i>	<i>Export (in millions of yen)</i>	<i>Export (in millions of yards)</i>
1919 . . .	44	738	280	..
1922 . . .	60	888	..	..
1925 . . .	73	1,179	416	..
1929 . . .	77	1,537	412	669
1930 . . .	79	1,387	272	577
1931 . . .	77	1,404	198	515
1932 . . .	79	1,537	288	844
1933 . . .	81	833	383	940

§ 2. PRESENT CONDITIONS

An exhaustive survey of contemporary industrial conditions in Japan could not be compressed into the available portion of this monograph. It has been necessary to concentrate upon a few major aspects, giving preference to those which reveal the essential characteristics of Japanese industry or distinguish it particularly from its Western competitors.

The first aspect thus selected, under the heading (a), bears upon national policy and the relationship between State and industry. The 'paternalism' of the Japanese Government and the national character of Japanese economic planning have been, as already indicated, prime factors

in the development of industry and seem likely to continue so. In Japan, as the previous section has shown, modern industrialization had the State for its godfather, if not its progenitor. This is in marked contrast to the experience of Great Britain, the U.S.A., and other of the Western industrial countries, where modern industry grew up in an atmosphere of strong individualism. The difference in this respect between Japan and the West has, it is true, lessened. In America the National Recovery Administration, in England Government intervention in the domains of industrial and agricultural organization, are symptoms of a movement towards greater control, while in Japan State control tends to diminish as the industrial machine becomes more complex and commercial organizations increase the range of their influence. Nevertheless, the relationship of State to industry in Japan is even now something radically different from what it is in the West and is such an important element in the industrial structure of the country as to claim a prior place in our analysis of Japanese industry. ✓

From this we shall pass to a survey (b) of distinctive features of the industrial structure itself, paying attention to those which appear to count most heavily in determining Japan's competitive capacity *vis-à-vis* the industries of the West, and including an examination of Japan's finances and of her industrial labour conditions.

Finally (c), the underlying factors of raw material resources, the food supply, and the problem of growth of population will be dealt with briefly.

(a) *National Policy in its Effects upon Industrial Development*

The primacy of the State in relation to economic affairs arose naturally in Japan out of the circumstances attending the transition from feudalism to a modern type of society. Only in the U.S.S.R. and, perhaps, in pre-war Germany has deliberate policy exercised such a profound influence upon the course of industrial development; and although the regulative authority of the State tends to weaken with the growth of private capital and powerful vested interests, the Japanese national bias in favour of corporate effort

under official leadership remains clearly apparent in the present-day organization of industry and commerce.

The characteristic partnership existing in Japan between the State and private enterprise deserves special attention, since it constitutes one of the main sources of her present competitive strength. Its form has varied considerably. In the initial stages of industrialization, the Government was obliged, owing to the absence of a commercial and industrial class and to the general lack of capital and technical experience, to function as entrepreneur. Undertakings were established and operated under direct State management, until they could safely be transferred to private enterprise. The majority of these passed eventually into the orbit of a few highly centralized family concerns enjoying special Government protection and patronage, but in certain spheres, and notably those of mining and heavy industry, the Government has retained important direct interests up to the present day.

In the steel industry State interests actually predominate, for although, under the stimulus of increased expenditure upon armaments and of Government protection and subsidies, private enterprise has greatly strengthened its position in recent years, no less than 51 per cent. of Japan's total output of steel and about 80 per cent. of her output of pig-iron are produced by the newly formed Japan Iron Manufacturing Company, in which the Government holds about 83 per cent. of the capital. This concern was formed in January 1934 and represents the first step towards an amalgamation of all the leading Japanese steel producers in a single merger under Government auspices. It had originally been the Government's objective to achieve this amalgamation at one stroke, but the stronger private firms, fearing that their profits would be unduly curtailed, decided to hold aloof. Thus, when the merger finally took shape as the Japan Iron Manufacturing Company, its adherents—apart, of course, from the Imperial Steel Works (until then under direct State management)—were neither very numerous nor very important. Although through its ownership of the Imperial Steel Works the new Company

occupies a position of pre-eminence in the industry, it is unable to exercise the monopolistic control aimed at by the Government with a view to stabilizing prices and checking the activities of the profiteer.

The evolution of the Japanese Government's relations with industry have been well described by Professor G. C. Allen.

'Although', he says, 'the State itself established and for a time controlled the majority of the industries and commercial services which now exist, it did not retain the ownership or administration of them once they were firmly rooted.'

After qualifying this statement with the mention of some important exceptions, the writer continues:

'Its [the Government's] main function has been, not to exercise a detailed control over industrial and commercial life, but rather to set up certain economic objectives and to assist private enterprise to attain them. In other words, its aim has been to create the conditions which should lead the entrepreneur to direct and organize the economic resources of the country in the way believed to be desirable. Only in this sense can Japan be said to possess a "planned economy".'¹

An important early step in this evolution from actual State ownership to national economic planning was the Government's exchange of the role of entrepreneur for that of industrial financier. Government financing of industry had been simplified by the absence of public indebtedness at the opening of the modern era which enabled the public credit to be used extensively for industrial purposes in the years succeeding the Sino-Japanese war. As the chief repository of economic power and initiative, the Government was able, moreover, to determine the proportion of national resources to be directed towards the production of capital goods. This was done by means of subsidies; control of the banking system; an appropriate tariff policy, and lastly a taxation system that pressed lightly on the entrepreneur and industrial capitalist. Of these several instruments of economic policy, the first two played the more important part during the early period. Thus through

¹ 'Economic History', a supplement to *The Economic Journal* of Jan. 1933, p. 629.

the agency of banks established under official auspices, and more especially through the Industrial Bank of Japan, the Government participated actively in industrial financing. Furthermore, the granting of direct subsidies to shipping and industry was, and has not ceased to be, an integral part of official policy, although its relative importance has declined since the Great War with the growth of private investment. According to an estimate made by Professor Moulton, Government expenditure under this head now amounts to no more than 3 per cent. of the total budget outlay.

Having concentrated upon the development of large-scale industry, first by the supply of technical experts and equipment, and later by the means which we have just mentioned, the State now faces a different set of problems arising out of the unexpectedly rapid and comprehensive growth of productive machinery which began during the War and continued in the immediate post-war period. This abnormal acceleration of industrial progress was accompanied, in Japan as elsewhere, by a tendency towards loose management and uneconomic methods of working.

The financial crises in which Japan became involved as a consequence of ill-regulated 'expansionism' in the post-war period and of the earthquake disaster might indeed have been construed as a warning against the dangers attending too close a connexion between the Government and private enterprises, for the Government's buttressing-up of banks and other commercial firms beyond the limits of sound finance certainly intensified the 'crash' when the latter could no longer be averted. In actual fact, however, the disorganization of economic conditions, as a whole, which characterized these years, gave birth to a movement towards rationalization and opened thereby a fresh field to Government intervention.

While the cause of rationalization received Government support from the first, the great capitalists, whose power and wealth had vastly increased during the War, were inclined to hold aloof in the hope that prosperity would return of its own accord. Not until the financial panic of

1927, which brought about the collapse of the great Suzuki firm, did they finally recognize the urgent need for some form of adjustment in the shape of agreements to control prices and limit output.¹ Voluntary cartels were then established by many of the principal industries.

But from 1930 onward deepening economic depression so intensified competition that these voluntary agreements were found an insufficient remedy. At this stage, therefore, some of the business leaders, who had previously resisted on principle any considerable measure of State interference, sought the aid of the Government with a view to supplementing voluntary control of industry by governmental control which could be legally enforced.

There was, moreover, a close connexion between the monetary policy pursued by the Japanese Government in the first post-war decade and the development of rationalization among the industrialists. As long as monetary policy continued to be of an expansionist nature, i.e. until 1926, the industrial leaders had little inducement to promote either rationalization or schemes for price and output control. In 1927, however, Mr. Inouye, the Finance Minister, sought to check the inflationary tendency which had ruled until then and his action in doing so has been held largely responsible not only for the financial crisis of that year but also for the subsequent development of cartel agreements.

Desiring to encourage this development with all the means at their disposal, the Government established in 1930 a temporary body whose terms of reference were 'to study and enquire into all important matters relating to the rationalization of industry and other measures to promote industry in general'. In particular it was intended thereby to inculcate more widely the principles of standardization and of scientific management, to improve accounting methods and to promote trade. It was in accordance with a proposal emanating from this *ad hoc* investigating body, that in June 1930 the Bureau for the Rationalization of Industry came into being. At its head the Bureau had the

¹ These agreements are dealt with under division (b) of this section.

Minister of Commerce and Industry and as its principal members a number of persons selected by the Government from among those 'rich both in experience and learning'. In practice, however, the Bureau was, and is, recruited almost entirely from among representatives of 'big business' and includes no members qualified to represent the interests of labour or those of the consumer, with the inevitable result that its activities have tended to promote a form of rationalization suited primarily to the interests of the capitalists.

The highest authority of the Bureau is the Board for Rationalization of Industry. Its work is carried on by a number of standing committees of which the three most important are: (1) The Committee on Control, to which further reference will be made. (2) The Committee on Control of Sales. (3) The Committee for Encouragement of Consumption of Home Products.

In August 1931 the Staple Industries Control Act was passed, the responsibility for its administration being entrusted to the above-mentioned Committee on Control. The general aim of the Act as defined by the Bureau is to terminate uneconomic competition by the promotion of cartel agreements which in certain circumstances can be made legally binding upon all members of a given industry. From the following account of the procedure which has actually been adopted it will be seen that the Act confers upon the Government, acting through the Committee on Control, wide powers wherewith to regulate commercial enterprise.

When in any industry, designated a 'principal industry' by the Minister of Commerce, a cartel agreement has been concluded by more than half the firms engaged therein, the said cartel is put under the obligation of reporting on the following items: (1) limitation and demarcation of production, (2) allocation of orders, (3) sale price, (4) channel of sale, (5) quantity of goods to be sold.

On the demand of more than two-thirds of the members of such a cartel:

'the State may enforce the whole or part of the agreement upon members or non-members thereof provided that such an enforce-

ment is deemed necessary for the protection of the industries concerned or the sound progress of the national economy'.

The appropriate Minister has also power to order an investigation of the business management of any concern adhering to the agreement and to revise the terms of such an agreement should it be deemed by the 'Committee on Control' contrary to the public interest or injurious to the interests of other industries.

It may be noted in passing that the Act establishes no criteria by which to determine automatically whether a cartel agreement is contrary to the public interest or not. Full power to adjudicate in such matters rests with the Committee itself.

// The extent to which the various industries have been brought within the jurisdiction of the Bureau of Industrial Rationalization varies considerably. Twenty-two altogether, including all the major industries in the country, have been subjected to the Act, more than half of them at their own request.// These include a number of industries—flour-milling, copper-smelting, and brass-founding—which had not previously been organized in cartels, together with others—such as cement—which had been organized and whose organization the Bureau has helped to consolidate. //In the case, meanwhile, of the two principal industries of Japan, cotton-spinning and silk-reeling, as well as the manufacture of artificial silk, inclusion under the Act was not carried out voluntarily, and when finally effected by means of a compromise between these industries and the Government, was limited to the operation of that part of the Act which imposed the obligation to report to the Bureau. These industries, the cotton industry in particular, have throughout shown less inclination than most of the others to submit to Government control, as became apparent in the course of the cotton negotiations of 1933 between Japan, India, and Great Britain, when opposition to the line followed by the official Japanese negotiators was expressed by the cotton-trade. //

While the Staple Industries Control Act is certainly the most outstanding measure recently taken by the Japanese

Government in the sphere of industrial policy, reference must also be made to the Export Guilds Law enacted as long ago as 1925, with the dual object of forming guilds or associations among manufacturers producing goods principally for export and among the actual exporters. The function of these associations, which are subsidized by the Government, is to regulate and promote the export trade of their members; in the case of raw silk the Government itself has instituted a system of inspection of goods designed for export in the hope that by this means causes of complaint as to the quality of Japanese goods may be eliminated. ✎

These legislative enactments and the organs of control established under their terms have been dealt with somewhat fully in order to illustrate the recent trend of State intervention in the affairs of industry. Studied objectively, they may be said to show concentration upon the object of increasing industrial efficiency and only to a minor extent an effort to safeguard the interests of consumers and operatives. An observation to this effect is to be found in the monograph on *Control of Industry in Japan*, submitted to the Institute of Pacific Relations Conference of 1933 by the Tokyo Institute of Political and Economic Research,¹ which contains the admission of a 'certain justification in the critical contention that the Principal Industries Control Act is nothing more or less than a law calculated to instigate formation of cartels without serving any social purport'. There is, in fact, little in the texts of the Japanese laws in question to correspond with the attempt to curb monopolistic tendencies and to realize social reforms which characterize much of the recent industrial legislation of the U.S.A., Great Britain, and other leading industrialized countries of the West.

The intrinsic importance of this legislation from both the industrial and the social point of view depends, however, less on the actual texts than on their practical application. In regard to this it has to be recognized that the Rationalization^{*} Bureau with all its accredited powers has not, up to the present, shown itself very effective as a new

¹ Reprinted in *Problems of the Pacific*, 1933.

force in industrial progress. It seems to have done little more than provide a channel through which existing forces can operate, and the co-ordination attained has by no means disposed of the existence of conflicting groups and units which hinder concerted action. Organization remains defective and faulty in some industries, of which cement and chemicals may be quoted as leading examples.

From the social aspect also, what has been previously said about the apparent tendency of Government legislation to support capitalism and neglect the interests of labour and of the general public needs qualification in the light of actual practice. The Japanese Government often shows itself extremely sensitive to gusts of public opinion and to 'drives' in the press, and instances can be found where Government measures opposed to the interests of producers have been adopted as a result of agitation from other quarters. As a concrete illustration one may quote the case of the taxi-cab drivers' campaign in 1933, which succeeded in inducing the Government to keep down the price of petrol.

The historical retrospect contained in the preceding pages shows the relationship of the Japanese Government to industry tending to grow less clearly definable with the passage of time. Thus, in the early stage of Japan's industrial development we find the State playing an almost paramount role by means of direct Government enterprise and by the promotion and supervision of private manufacture. As the latter developed, the Government began to abandon individual control in favour of the general direction of economic objectives, using for this purpose the resources of the national exchequer, its power of controlling the banks, and the opportunities afforded by the political affiliations of the big families dominating industry and finance. This movement continues, but has been to some extent overshadowed by a still more recent development in the shape of legislation designed to control and direct rationalization movements, improve industrial technique, adjust prices, and regulate production. As the complexity of the economic structure increases, however, the task of the Government becomes more difficult, and although it

still exercises a great influence over industry and trade, a question arises whether State control can be reconciled with the later capitalist developments of Japanese society. Conflicting interests multiply, and State interference or guidance becomes more and more a delicate and dangerous operation.

(b) *Distinctive Features of Industrial Organization, Finance, and Labour*

1. *Organization.* The industrial progress of Japan has been rapid but uneven inasmuch as the simultaneous and parallel development of both heavy and light industries characteristic of western industrialization is, in her case, generally absent. If an explanation were to be sought for the disparity between Japan's undoubted pre-eminence in certain branches of light manufacture and her backwardness in most of the so-called basic industries, it would probably be found to lie partly in the peculiar aptitudes and limitations of Japanese labour¹ but mainly in certain natural deficiencies in ore and fuel² which render heavy industry as a whole unprofitable. The fact remains that, apart from her subsidized ship-building industry, Japan's manufacturing energies have hitherto found their chief outlet in one or two closely interrelated fields, though in this respect there are signs of a change as will be explained when we come to deal with Japan's industrial future. As regards production for export, she has until recently concentrated almost entirely upon the manufacture of textiles, and although many other commodities are now finding a place within her industrial range, it is in this direction that her efforts to compete with the West have achieved the most striking success.

Before proceeding to consider in detail the organization of Japan's all-important textile industry, reference must be made to those features and tendencies of Japanese industrial development as a whole which to a foreign observer will appear most highly characteristic. Of these, perhaps the most immediately striking is the high degree of integration

¹ See pp. 112 et seq.

² See division (c) of this section.

achieved in most of the leading industries through the medium of cartel and trust organizations. The Japan Cotton Spinners' Association, for example, embraces about 97 per cent. of all cotton spindles and about 50 per cent. of all power looms in the country. Other industries possessing strong cartel organizations are iron and steel, spun silk, rayon, paper, cement, and phosphate manure, not to mention the many regional associations which are being established in the hope of eliminating competition among small and medium producers. It cannot of course be asserted that these cartel agreements always function smoothly, nor have they sufficed to avert an occasional collision between rival groups, such as that which occurred towards the end of 1934 between the Japan Cotton Spinners' Association and the Federation of Cotton Textile Industrial Guilds, a body representing many of the small independent weaving factories. They are, however, the basis of the strongly unified organization which has contributed so much to Japan's success in the export field and we need not therefore search long in order to find a measure of their practical importance.

In a certain sense this pronounced development of the cartel system may be regarded as a manifestation of the spirit of group combination which permeates Japanese national life, having its origin in the feudal and religious traditions of Japanese society. In the following passage of his report on the textile industries of Japan and China,¹ Mr. Arno Pearse alludes to this spirit as a factor fundamental to Japan's commercial success:

'Family or group organisations in Japan are largely fostered by the two prevalent religions, Buddhism and Shintoism, which in their tenets combine patriotism and family worship, in consequence of which the individual does not regard, in the first place, the benefits or disadvantages which may arise through any action of his to himself, but as they will affect the State. Not the individual is the unit, as is the case in Europe and U.S.A., but the family or group in the largest sense, i.e. the State. To this fundamental fact must be attributed a great deal of Japan's phenomenal advancement. This group

¹ See Pearse, *Report on the Cotton Industry of Japan and China*, 1930, p. 14.

spirit has endowed the people with an inherent power of organisation, and after coming in daily contact with the leading men of the cotton industry one is forced to attribute a large portion of its unparalleled progress to this national patriotism, which permeates all the men with whom I have discussed matters, and I am told that even operatives in humble positions have the same outlook.'

While the cartel would seem to have proved its utility as a permanent feature of Japanese economic life, there is a strong tendency in certain quarters towards the even closer forms of association represented by industrial mergers and trust agreements. Mention has been made already of the efforts made by the Government to reorganize the steel industry on these lines (see p. 66). Another conspicuous example of this development is afforded by the paper industry, 85 per cent. of which is now subject to the control of a single giant corporation, the Oji Paper Manufacturing Company, representing the amalgamation of a number of concerns formerly belonging to the Japan Paper Manufacturers' Association. The fact that two such important industries should be moving towards a still higher plane of integration has its importance as indicating lines along which the Japanese cartel system as a whole may develop.

This national bias towards corporate action, fundamental though it is to the present efficiency of Japanese industry, could scarcely have produced the high degree of industrial concentration witnessed in Japan to-day had it not been for the centralization of financial control which dates from the very beginning of Japan's industrial era. Ever since the leading industries passed out of direct Government tutelage financial power has been mainly concentrated in the hands of a few great corporations which have gradually been built up in the feudal spirit under the aegis of families such as those of Mitsui, Mitsubishi (Iwasaki), Yasuda, and Sumitomo, to name the four most outstanding examples. Pioneers with the Government in establishing some of the earliest industrial enterprises in Japan, these undertakings have prospered exceedingly with the result that to-day their ramifications extend into almost every department of Japanese economic life. Indeed, so vast

are the aggregations of industrial and business capital which they control that altogether 70 per cent. of all Japanese trade and industry is said now to be in the hands of fifteen great houses. While much truth is contained in an observation of Mr. Pearce's to the effect that 'the whole State is one trust', Japan might possibly be represented with greater accuracy as being in the grip of a financial oligarchy whose power to influence economic aims and development may be inferred from the significant fact that in 1933 of the country's entire banking capital 22.65 per cent. was vested in three concerns, namely those of Mitsui, Mitsubishi, and Sumitomo, while five further concerns accounted for an additional 30 per cent. Thus in all, eight great firms account for over half of the country's banking capital.

Using the financial institutions under their control as nuclei round which to build up an ever-expanding complex of activities, both industrial and commercial, the great capitalists have in recent years gained a notable ascendancy over the older type of industrialist whose more limited resources had been considerably sapped by the general depression existing after 1930. This tendency is referred to in the following passage of a report on the Control of Industry in Japan, submitted to the I.P.R. Conference of 1933 by the staff of the Tokyo Institute of Political and Economic Research:

'The financial plutocrats, who had hitherto had their interests more or less in various branches of industry, have attempted, and succeeded, in securing a firmer grip on industry since the world economic depression started. . . . Naturally some gained more power than others: what is most noteworthy is the ascendancy of the financial capitalists as compared with the industrial capitalists. In face of the advance of the financial capitalists into the field of industry, by dint of their own capital as well as of other people's capital which they gather through their own banking enterprises, the industrial capitalists, who have few or no such facilities, have gradually had their power of industrial control reduced.'

A complete list of all the enterprises now controlled, for example, by the house of Mitsui makes impressive reading, including as it does such diverse activities as banking, coal-mining, rayon manufacture, shipping, and life-insurance.

In the textile industry alone, Mitsui interests constitute a striking example of vertical trust organization, for not only does the firm own a considerable share in the capital of the Kanegafuchi Cotton Manufacturing Co., the Shanghai Cotton Manufacturing Co., and other mills, but likewise it controls the Toyoda Automatic Loom Co., the largest domestic manufacturers of cotton-spinning machinery, and the Toyo Menkwa Co., one of the three largest cotton importing and cotton exporting firms in Japan, as well as various shipping and warehousing concerns; behind all these manifold activities stands the Mitsui Bank with a capital of 10 million pounds sterling.

The great financial power possessed by these leading commercial firms has frequently brought political power in its train. Whereas in the Meiji era certain of them were openly patronized by the Government and accorded by Imperial favour the positions of privilege in which they quickly rose to fortune, later the situation was reversed and we find the industrialists on more than one occasion giving evidence of a power to make and unmake governments. It has sometimes been suggested that the deflationary policy pursued by the Minseito administration up to 1931 was inspired by Mitsubishi banking interests and that the subsequent reversal of this policy on the accession to power of the Seiyukei party was not unconnected with the wishes of the Mitsui textile group. Whatever be the truth of this hypothesis, we can at least be sure that these two great concerns through their affiliations with the parties in question have at times had a decisive voice in the formulation of Government policy. The antagonism towards the industrialists, which has lately become so noticeable in certain military circles and among the peasantry, springs from a suspicion that their political power has sometimes been used in a somewhat anti-social manner. For this reason it is widely believed that the present ascendancy of the military element in Japanese affairs will lead to the definite curtailment of their influence in the political sphere and conversely to a greater measure of direct State control over economic life.¹

¹ According to a report published in the *Japan Weekly Chronicle* for

In order to understand clearly the competitive advantage which Japan derives from her industrial and commercial organization we may now consider specifically the cotton textile industry as representing the sphere in which this advantage has hitherto been most apparent. In a paper read before the Royal Statistical Society¹ as long ago as January 21st, 1930, Mr. Barnard Ellinger enumerated certain advantages which Japan was then alleged to enjoy, compared at any rate with Great Britain. They were:

1. Cheaper labour in spinning and weaving.
2. Greater proximity to large consuming markets in the Far East.
3. Better organization of the industry.
4. Cheaper cotton.

To these must be added a fifth advantage which has operated at least partially since 1931, namely currency depreciation.

For a detailed appraisal of Japan's advantage with respect to cheap labour the reader may be referred to a comparative estimate of production costs in Japan and Lancashire, which will be found on pp. 119-24. Here it will be sufficient to indicate that in so far as Japanese labour costs have in recent years fallen progressively below those of Great Britain, this fall has been due to the coincidence of at least three distinct factors; namely the existence in Japan of a less 'expensive' standard of living making possible an initially lower scale of wages, a greater degree of flexibility in the Japanese wage structure, and lastly a rising standard of productivity per worker due to increased efficiency. While in the present and ensuing sections we shall treat each aspect separately, it must be borne in mind that Japan's level of labour costs is a function of the sum total of all these

Jan. 10th, 1935, the great firms of Mitsui and Mitsubishi are intending to admit the public to an increased participation in the industrial concerns under their control. The report continues: 'Not only is this action necessary to curb public criticism that they are monopolizing profitable enterprise but it is evident that executives of these financial groups think fit to forestall part of the losses that may be incurred, when depression comes.'

¹ See *Journal of Royal Statistical Society*, vol. xciii, part ii, 1930.

factors and that any tendency to magnify one out of proportion to the rest must lead to confusion.

Turning to the second of the points enumerated by Mr. Ellinger, it will be obvious that Japan's closer geographical proximity to certain important consuming areas makes possible a saving in the cost of freight. At the same time freight charges comprise such an insignificant part of the final cost of cotton goods—probably at most not more than $2\frac{1}{2}$ per cent. on the c.i.f. value—that Japan's advantage over European countries in this respect is not a factor of prime importance. She enjoys, however, an inestimable advantage in the fact that her closer associations with China, Manchuria, and in lesser degrees with other Asiatic markets enable her to keep in more direct touch with, and to obtain a more thorough insight into, the needs of the inhabitants and to adapt herself more easily to local conditions than Western traders can hope to do. A factor which must also be taken into account is that of Government aids to shipping. Although the most recent figures bearing upon this subject are not easily arrived at, there is some reason to believe that they have lately been on a rising scale. Direct shipping subsidies amounted to 6,840,000 yen in 1928-9, to 7,361,000 yen in 1929-30, and to 10,205,000 yen in 1930.¹ While a large share of these sums has been used to subsidize passenger services, they have also enabled the leading Japanese shipping companies to offer substantial rebates on certain classes of freight. Thus even where there can be no question of greater geographical proximity, the balance of advantage in the matter of freight charges may well rest with the Japanese exporter.²

¹ See British Data Paper, *The Textile Industry in Lancashire, China, India and Japan*, submitted to the Institute of Pacific Relations, Banff Conference, and quoted in *Problems of the Pacific*, 1933, p. 53.

² Example of a case in point is afforded by freights to Mombasa, viz.:

<i>From England to Mombasa</i>		<i>Per freight ton</i>
Goods of £160 value and under		57s. 6d.
Goods of more than £100 value		70s.
<i>From Japan to Mombasa</i>		<i>Per freight ton</i>
All piece-goods		54s.

The third and fourth of the advantages alleged to be enjoyed by the Japanese cotton industry were 'better organization' and 'cheaper cotton'. Our next object will therefore be to show in what these advantages actually consist and how they have contributed towards increasing Japanese competitive power. We shall do so by outlining briefly certain distinctive features of Japan's industrial and commercial organization, as exemplified in the textile industry.

Supreme authority over practically the whole cotton industry is exercised by the Japan Cotton Spinners' Association, which embraces, as has been said, 97 per cent. of all cotton spindles in the country and about half the power-driven looms. (The weaving section has no trade organization of its own.) By requiring its members to furnish at regular monthly intervals detailed particulars as to production, working conditions, consumption of raw cotton, &c., the Association possesses data which enable it to function as a centralized 'brain', co-ordinating all the various activities and processes of the industry. It is this body which is responsible for research into markets and for determining export quotas and prices. It has, moreover, plenary powers to act on behalf of the industry in foreign trade negotiations so that its leaders must be industrial statesmen in the widest sense with expert knowledge and experience extending far beyond the frontiers of Japan. That most of them possess these qualifications is suggested by the following passage of Mr. Pearse's report:¹

'The leaders of the industry which one meets at the Association do not seem to regard the knowledge of spinning and weaving as the most essential requirement; these processes have become stereotyped through machinery, whilst there is a constant flux of the economic, commercial, and financial conditions which require more brain to handle than the mere manufacturing processes. The leaders of the industry are not selected on account of their technical achievements, but rather for their knowledge of commerce and aptitude for reorganisation, though most of them also have had a technical training.'

¹ Pearse, op. cit., p. 26.

The Association comprises some 70 firms, controlling 272 mills, about 9 million spindles, and 90,000 looms, of which more than half are automatic. The majority of the mills are engaged not only in spinning but in weaving and finishing as well. There is, furthermore, a tendency for the larger units to undertake silk and wool weaving and the manufacture of rayon and staple fibre. In Lancashire, 400 companies control¹ 46 million spindles, while spinning, weaving, finishing, and printing are usually carried on by separate establishments. An even more fundamental contrast, however, between the two countries lies in the extent to which the Japanese industry, or at any rate that section of it which caters principally for the export market, is dominated by a small group of giant concerns.

Outstanding in this group are the following: Dai-Nippon Boseki Kabushiki Kaisha; Kanegafuchi Boseki Kabushiki Kaisha; Toyo Boseki Kabushiki Kaisha—Osaka Godo Boseki Kabushiki Kaisha (these two having been amalgamated in 1931); the Fuji Boseki and the Nisshiu Boseki. Whether measured by their financial resources or by the number of spindles which they control, these five undertakings represent over 50 per cent. of the entire industry; in addition they are allied through interlocking finance with the three major cotton importing and exporting establishments as well as with banking, shipping, and warehousing interests. Although the weaving section has yet to achieve the closely integrated structure shown by the spinning sections, and compares, in fact, none too favourably with the corresponding section of the industry in Great Britain, there can be little question that a relatively greater degree of concentration in large units constitutes one of the most obvious advantages enjoyed by the Japanese industry as a whole.

The organizations for the import of raw cotton and for the distribution and sale of finished goods afford perhaps the most striking example of the manner in which the Japanese co-ordinate, to the advantage of the whole in-

¹ Based on information supplied by the Joint Committee of Cotton Trade Organizations, Manchester.

dustry, processes kept elsewhere entirely distinct from each other. The method of purchasing raw cotton and the choice of types of cotton purchased, the centralization of selling agencies, and the scientific study of markets have each in varying degree been factors in determining the low price at which Japanese cotton goods can be sold. It is necessary, therefore, to supplement the details given as to the manufacturing side of the industry by a brief description of its commercial organization.

As the common practice of 'hedging', or selling forward to neutralize possible price fluctuations, is seldom, if ever, resorted to by Japanese merchants, it follows that a considerable element of speculation enters into most of their raw cotton transactions. Stocks of raw cotton are not, as in Great Britain, carried by the merchant but by the spinner, and it is a common occurrence for one of the larger combines to have 30,000, 50,000, or even 80,000 bales unhedged. While such methods expose both the spinner and the merchant to serious losses, profits are correspondingly great, and it is interesting to note that Mr. Pearse considers the present prosperity of the Japanese textile industry to be in some measure the fruit of successful speculation during the War period, when the price of raw cotton advanced from 30 to over 100 yen per picul:

'The profits made in this way during the war have enabled them to build up such huge reserves that the average reserves of all the mills belonging to the Japan Cotton Spinners' Association, which represents to-day 97 % of the total spindles of Japan, is over 60 % of the paid-up capital, and that of the large combines substantially over 100 % of their paid-up capital. With these huge war profits, which have amounted, according to the official showing of the Association, to several million pounds sterling for each combine, they have extended their mills in Japan, given bonus shares, they have added to the reserves, and finally they built with this superabundance of money mills in China which to-day represent more than one-third of the total spindles in China.'¹

In existing circumstances, the Japanese raw cotton market is completely dominated by the four great spinning

¹ Pearse, *op. cit.*, p. 141.

and weaving combines which are buyers on such an enormous scale that they can generally dictate their own terms. Indeed Mr. Ellinger quotes a statement to the effect that they have in this way often been able to obtain supplies as much as 3 per cent. below replacement cost. The business of the Japanese cotton importer would be hazardous in the extreme, but for the fact that the merchanting section of the industry resembles the manufacturing section in that 80 per cent. of the raw cotton imported into Japan is handled by a small group of big firms commanding enormous resources, viz. the Toyo Menkwa Kabushiki Kaisha, the Nippon Menkwa Kabushiki Kaisha, and the Goshi Kabushiki Kaisha. These three firms not only handle the bulk of all cotton imports, but are likewise channels for the export of an approximately equivalent percentage of cotton yarn and piece goods; consequently losses incurred through selling raw cotton too cheaply can often be recouped out of profits made on the sale of finished goods. The firms have interests, besides, in the productive side of the industry which they are said to be continually extending.

The question arises as to how far this co-ordination of buying and distributing agencies has helped to reduce the final cost to the consumer of Japanese cotton goods. While it would be rash without fuller knowledge of Japanese methods of costing to hazard any final conclusion, the advantages of the Japanese system appear to be twofold. First it ensures that cotton shall be supplied to the mills at cheap rates, for not only is the cost of hedging saved but the chief cotton importers, inasmuch as they are also the firms which export the finished product, may hope to regain by purchasing their cloth from the mills at a relatively low price anything they may have lost in the first instance through selling their cotton too cheaply. To quote Mr. Ellinger:¹

‘Of course these firms cannot always be right in their speculations, but when they are wrong they cut their losses, and may even recoup themselves by profits on piece goods, on their mills shares,

¹ Ellinger, *op. cit.*

or even on their wool and silk business, in which they are largely interested.'

Secondly, the Japanese method of conducting a two-way import and export business not only saves the commission and brokerage payable to intermediaries but also simplifies exchange operations. The writer just quoted testifies thus to the manner in which the various branches of the Japanese textile industry co-operate towards a common end:

'The business, in fact, is a chain of which the first link is efficient organisation, in India, America, and other markets, for cotton buying; the second, delivery of cheap cotton to the mills; the third, cheap manufactured goods bought from the mills; the fourth, the selling of such goods in foreign markets with a small rate of profit. The turnover of the whole business runs into such immense figures that it pays on a very small margin.'¹

Having dealt with the method of purchasing raw cotton current in Japan, we now come to consider the benefit to Japanese spinners of being able to use cheaper grades of raw cotton than those generally used in Lancashire. First, however, we must note an important difference between the technical equipments of the British and Japanese industries which helps to explain the latter's advantage in this respect.

In Japan the textile industry began to expand at a time when spinning technique elsewhere in the world was already far advanced. It was able therefore to profit by the perfecting of the ring spindle—a technical development which had come too late to be adopted by Lancashire on the same scale. The result has been that whereas in Lancashire there are still more than three times as many mules as rings, in the Japanese industry ring spindles have always preponderated and 90 per cent. of Japanese mills are said to be equipped with them at the present day. The chief advantage of the ring spindle lies in its ability to achieve a higher level of production in spinning the low and medium counts. It has thus been possible for Japanese spinners to make extensive use of low-priced Indian or Chinese cottons and to produce, by blending these with certain American varieties according to jealously guarded formulae, a finished

¹ Ibid.

article which compares not unfavourably with the product of Lancashire mills while it sells at a lower price. Until 1930 Japan imported from India and China annually about two-thirds of her raw cotton supply whereas the proportion of Indian cotton taken by British spinners was seldom more than 12 per cent. of the total imported into this country. Thus, Japanese spinners were making use on an extended scale (during the three years 1927, 1928, and 1929) of raw cotton costing on an average 20 per cent. less than that chiefly employed by Lancashire.

It can be demonstrated that labour costs represent only between 16 and 26 per cent. of c.i.f. costs for three standard types of Lancashire cotton cloth, and a substantially smaller (perhaps less than half as great)¹ proportion in Japan. The largest part of costs consists of raw material costs, and these are approximately the same for any given quality in Japan and England. This being the case, we can conclude that in the past a substantial contributory cause of Britain's loss of trade to Japan has lain in Japan's greater concentration upon low quality cottons made from cheap raw material.

Since 1931, however, the Japanese industry has tended to draw a higher proportion of its raw cotton from the United States. In 1934 imports of American cotton totalled 1,913,035 bales, of Indian cotton 1,902,389 bales. In the two previous years the American share of Japanese cotton imports had been even larger, and it is mainly a result of the Japan/India trade agreement, which came into force on January 1st, 1934, that Indian cotton imports have again greatly increased in volume relative to those from America. Despite this increase, however, there is reason to believe that many mills have effected a permanent change-over to American cotton as a preliminary to the spinning of finer counts and to the use of high draft machinery requiring fibres of greater tensile strength.² The fact that India,

¹ See *Manchester Guardian Commercial Supplement*, July 1st, 1933, p. 3.

² According to particulars given by the *International Cotton Bulletin* for Oct. 1934, the percentage of spindles spinning 22's to 40's was 37·8 per cent. in the first four months of 1934, having been 37·1 per cent. and 32·3 per cent. respectively in the corresponding periods of 1933 and

China, and other Asiatic customers of Japan are increasingly able to manufacture the coarser counts for themselves may well cause the Japanese spinner to concentrate more and more upon these higher qualities—a development which would have the effect of raising proportionately his consumption of American and other long staple cottons and so indirectly of placing him upon a more equal footing with Lancashire as regards the cost of his material.

Expert investigation has failed to produce any direct evidence that the Japanese textile industry is in receipt of a Government subsidy. Dr. Wissalink of Rotterdam who made an extensive study of the subject in 1932 came to the conclusion that the Japanese Government, while naturally anxious that cotton exports should be maintained at the highest possible level, was not affording the industry any direct assistance. Exports are, however, subsidized involuntarily by the domestic consumer as a result of the practice of fixing differential prices for yarn for home and export consumption. By charging higher prices at home than abroad, many Japanese mills are able to recoup themselves for losses incurred in the export trade. Price discrimination of this kind is facilitated by the fact that the small firms which produce most of the cloth for the home market are almost wholly dependent for their supplies of yarn upon the Japan Cotton Spinners' Association, which can charge them virtually whatever it likes and use the profits thus realized to subsidize export sales.

Resuming then the various features of organization which constitute a special source of strength to the Japanese cotton industry, we find them falling under the following heads:

1. Centralized control exercised over almost the entire industry by the Japan Cotton Spinners' Association, whereby it has been found possible to check over-production and uneconomic competition.
2. Large manufacturing units, working two shifts a day

1932. Simultaneously there has been contraction in the number of spindles engaged upon counts under 19.

and equipped with ring spindles and to a considerable extent also with automatic looms.

3. Shipping subsidies.
4. Concentration of raw cotton imports in the hands of a few large trading concerns, and the system of bulk purchase, whereby the spinner is often able to obtain his raw cotton at or below replacement cost.
5. Greater efficiency in marketing the finished product resulting from centralization of marketing agencies, from maintenance of closer contact with customers, and from intimate co-operation between the manufacturing and mercantile sections of the industry.¹

It was inevitable that the cotton textile industry should have been chosen to illustrate the outstanding trends in Japanese industrial development. Its meteoric growth has only been surpassed by that of the rayon industry and it is likely to remain, at any rate for some years to come, the most important single factor in the industrial rivalry of East and West. Lest, however, a misleading impression be conveyed as to its relative importance in the Japanese economy, reference must be made to the position occupied by raw silk and rayon. In 1933 and 1934 the export of textiles from Japan, as shown by the monthly estimates of the Mitsubishi Economic Research Bureau, was as follows:

(In thousands of yen)

	1933	1934 (11 months)
Cotton goods . . .	418,963	466,298
Silk and silk tissues . .	456,513	260,955
Rayon . . .	86,865	120,078

In 1934 for the first time exports of cotton goods surpassed in value those of raw silk and silk manufactures. Although still employing rather more than a third of all Japanese textile workers, the silk industry has declined sadly from the dominant position which it occupied during the ten years prior to 1930 when, stimulated by mounting

¹ These headings are taken from the valuable Political and Economic Planning Report dealing with the British cotton industry.

prosperity in the United States, silk exports from Japan were never less than double the value of her cotton exports. Since 1930 a serious curtailment of the American market (the only market of real importance for Japanese raw silk), coinciding with a steady increase in the consumption of rayon, has dealt the industry one blow after another, which in the primitive state of its organization it could scarcely have withstood without Government subsidies on a colossal scale.

The cotton and raw silk industries afford a remarkable contrast to each other, for, whereas the former commands all the resources of modern industrial technique, the latter requires little power and no complicated machinery, and is therefore still carried on in many parts of Japan under primitive conditions. Primarily an agricultural pursuit, it represents a secondary, but nevertheless extremely useful, source of income to countless farming communities in all parts of Japan.

When removed from the cocoons, the silk is graded and sold for reeling to the filatures, of which there are some 2,700 in the country. Unlike cotton, raw silk has barely as yet become the basis of a major manufacturing industry, the weaving performed in Japan being to the extent of some 90 per cent. absorbed in the home market. At the same time under the pressure of increased competition from rayon a measure of reorganization is now being attempted. Small filatures have been amalgamated so as to form more economic units. Some of the great cotton combines are also turning their attention to the weaving of silk tissues, so that in future an increasing proportion of Japan's silk exports may be expected to take the form of fabrics. Finally, the Ministry of Agriculture, which in 1924 introduced a rigorous system for the inspection and grading of raw silk for export, is seeking to introduce more scientific methods of production which will improve further the quality of the product and the economic return to the farmers. The silk egg control law is one example of the somewhat belated efforts now being made to rationalize the business of sericulture. When the law becomes effective the Minister of

Agriculture will supply only the ten best varieties of egg-card to the prefectural governments, which in turn will arrange for the propagation of eggs and for their distribution to the farmers. These latter were formerly liable to have no fewer than six hundred different varieties of egg foisted upon them by irresponsible private dealers, and it is claimed that the proposed standardization will have the effect of reducing the cost of cocoon production (80 per cent. of the total cost of raw silk) by about ten million yen annually.

In turning from the oldest to consider the youngest branch of the textile industry, it is important to realize that, although rayon manufacture was begun in Japan scarcely more than ten years ago, rayon textiles are now Japan's third most important export, being surpassed in this respect only by cotton goods and raw silk. In an equally short space of time she has become the world's second largest producer, her output having risen from approximately 5,000,000 lb. in 1926 to 90,428,000 lb. in 1933 and 155,000,000 lb. in 1934. The capital invested in the industry already amounts to nearly 200 million yen. Efforts made by the Japan Rayon Association to organize production on cartel lines have not proved entirely successful owing to the fact that the newer concerns, many of which through insufficient capitalization are a potential source of weakness and instability to the industry, have been reluctant to participate. While, therefore, expanding markets at home and abroad seem to presage continued prosperity, drastic reorganization may in the future become necessary. In this sense the prospect ahead of the industry is not wholly unclouded.

Our immediate concern, however, is with the Japanese rayon industry as a factor in international trade competition, for not only has Japan become in a remarkably short space of time the world's largest exporter of rayon goods but also, as the following figures show, her ratio of export to total production is higher in this than in any other branch of the textile industry. In 1934, for example, Japan exported 51.6 per cent. of her total rayon output as against 44.5 per cent. of her total output of cotton goods. The corre-

sponding percentages for Great Britain were 19.7 per cent. for rayon and 41.0 per cent. for cotton. In absolute figures rayon exports during 1934 totalled 80 million lb. for Japan, 18 million lb. for Britain.¹ Corresponding figures for cotton piece-goods were respectively 644 and 498 million lb.

If, as the above data seem to suggest, Japanese competition has actually developed greater intensity in the rayon industry than in any other branch of textile manufacture, we may look for an explanation to the fact that in Japanese rayon production, materials account for about 40 per cent. of the total cost and labour 25 per cent., whereas in producing, for example, 40's cotton yarn, materials account for about 75 per cent. and labour for 8 per cent.² Since wages in the textile industry are substantially lower for Japan than for Britain while the cost of a given type and quantity of raw material is much the same for both countries, it becomes obvious that Japan's competitive advantage must be greater in the case of rayon than in the case of cotton. The fact, moreover, that wood-pulp, the industry's chief basic requirement, is largely obtainable from sources within the Japanese Empire and can be purchased on a yen basis removes for the rayon manufacturer the element of uncertainty arising out of exchange fluctuations.

The tendency of Japanese producers to concentrate upon grades of rayon inferior to those normally exported from Britain has probably lessened the impact of Japanese competition in one quarter while causing it to be the more severely felt in another. To illustrate this point we may quote some observations made by Mr. George Douglas, chairman and managing director of the Bradford Dyers' Association Limited, in the course of his speech at the Company's annual general meeting held on February 28th, 1935:³

'Japanese rayon goods must be regarded as supplanting Lancashire's fine cotton trade. This foreign export expands year by

¹ Figures based on calculations made by the Joint Committee of Cotton Trade Organizations, Manchester, and by the Japan Rayon Producers Association.

² Figures derived from the Joint Committee of Cotton Trade Organizations, Manchester.

³ As reported in *The Times* of March 1st, 1935.

year, until in less than one decade it has grown from its start of nil to the formidable figure of 345,700,000 square yards in 1934. Nearly half of this volume has come into British Empire markets. No less than 76,250,000 square yards of cheap rayons were shipped by Japan to India in the year 1934, in replacement of the better qualities of cotton goods. It has displaced also a very important volume of Lancashire's piece dyed cotton trade in neutral markets—the Dutch East Indies, for example.'

How far the displacement of cotton by rayon textiles can be carried is a matter for expert opinion, but if Mr. Douglas has given a fair indication of the present trend we may reasonably anticipate that any further expansion of Japanese rayon exports will have its repercussion, as far as Great Britain is concerned, less upon the actual rayon manufacturers than upon certain sections of the Lancashire cotton trade.

Reference may also be made to a development of the rayon industry which, though still in its early stages, opens up vast possibilities for the future. This is the invention and perfection of a synthetic staple fibre produced from cellulose by the viscose process, but having many of the properties of raw cotton, so that either plain or mixed with the latter it can be spun on ordinary cotton-spinning machinery. The potential importance to Japan of a possible substitute for raw cotton based upon materials easily obtainable in the Japanese Empire obviously requires no emphasis, and it is hardly surprising to learn therefore that plans have been made for the commercial production of this new material on a rising scale. The output figure for 1934 was in the region of 2,000,000 kilograms and it is estimated that this figure will be increased to at least 10,000,000 in the present year, when a number of new factories are to be completed.

In the foregoing brief survey of Japanese industrial organization it has been found convenient to concentrate upon the textile industry as being not only the spear-head of Japan's export 'offensive' but also as best typifying the form of industrial structure characteristic of the country. This review, limited though it is in scope, suggests one

general reflection on the subject of economic activity in Japan which may fittingly be stated in conclusion of this portion of our study.

Within every major Japanese industry, whether its product enters into competition with the West or not, a process of controlled development is at work. In the first instance it is carried forward by leading members of the industry itself; behind these, however, stand the great financial capitalists, few in number but all embracing in the scope of their interests. Lastly, presiding over the whole industrial hierarchy is the Government which, as the highest embodiment of paternalist tradition, takes an integrated view of this process throughout the entire industrial field and directs it towards certain clearly seen objectives. Moreover, all classes of the community, from cabinet ministers down to the humblest artisan, will be found to share the conviction that these objectives are not primarily definable in terms of financial profit but in those of national prestige; each new market conquered, each additional shipload of cotton drill or rayon leaving a Japanese port, even each triumph over a technical difficulty, is held to exalt the nation and to bring Japan nearer to the 'place in the sun' which other nations would, as many of her people conceive, deny to her.

2. *Finance.* The advantage derived by Japan from her currency depreciation has occupied so much space in all discussions of her competition with Western industry that the present section on finance may suitably commence with a review of the currency situation and an attempt to appraise the extent of the advantage which depreciation has bestowed on industry, its degree of permanency, and the extent to which it is counteracted by increased costs of production in Japanese factories. The events leading up to Japan's departure from the gold standard will first be summarized.

Japan abandoned the gold standard at the end of 1931 since when the exchange value of the yen has fluctuated widely. Inevitably the depreciation of a manufacturing country's currency in relation to the currencies of its commercial rivals in world markets confers upon the export trade of the country concerned an immediate bonus to the

detriment of its competitors. Subsequently the benefit to industry of higher receipts, in the local currency, for manufactured exports, tends to be offset, first by the higher cost, in the same currency, of the raw materials imported for manufacture, and secondly, by the increase in manufacturing costs resulting from the inflation of internal prices and the consequent raising of wage levels which are the logical accompaniment of currency depreciation.

At the close of 1931 Japan was faced with a twofold crisis owing to the fact that the outbreak of hostilities in Manchuria had coincided with a period of deepening world depression which caused a severe shrinkage in her export trade. Fears as to her financial position, intensified after Great Britain's departure from the gold standard in September 1931, led to such a marked flight of capital that the Government was forced to take action in order to prevent a dangerous depletion of the national gold reserves. The decision to reimpose the gold embargo was therefore largely dictated by circumstances beyond the power of any administration to control.

Three factors had made Japan's ultimate departure from the gold standard practically inevitable. They were:

First, heavy 'bear raids' on the Japanese currency by foreign speculators, undertaken in the belief that Japan would not be able to deflate sufficiently to bring her prices into line with those of gold-standard countries and so establish an equilibrium in the balance of payments at gold parity.

Secondly, the continuous pressure brought to bear upon the Government by important Japanese commercial concerns which had speculated heavily in U.S. dollars and therefore stood to profit considerably by a fall in the exchange value of the yen.

Thirdly, the enhanced competitive power of British exporters resulting from sterling depreciation. Of these three factors, only the last-mentioned has any direct connexion with the growth of manufacturing activities.

Space does not admit of an account of the events leading up to the gold embargo and it must suffice to record that its

reintroduction, after a suspension of less than two years, took place on December 13th, 1931, following upon the accession to power of the Seiyukai Party. Within three months the exchange value of the yen, abandoned to the play of natural forces, depreciated to some 34 per cent. below gold parity. The ensuing table shows the course since then pursued by the exchange besides indicating the influence of currency devaluation upon the price structure:

	<i>Gold value of yen as per cent. of former par value</i>	<i>Wholesale price index 1914 = 100</i>	<i>Retail price index 1914 = 100</i>
1931, November . .	100	111	130
1932, August . .	54.4	127	132
1933, January . .	42	140	148
1933, April . .	42	133	144
1934, March . .	37	134	149

(Figures derived from *League of Nations Statistical Year Book*, 1933-4).

From these figures it will be apparent that, despite measures designed to control speculation, the yen depreciated most rapidly between November 1931 and August 1932 (the sharpest fall actually taking place during the month of August 1932, when, owing to fears of inflation, the yen declined from 61.7 to 45.6 per cent. of its former gold parity).

Between August 1932 and March 1934 no further violent fluctuations were recorded, but depreciation continued steadily until in the latter month the yen was being quoted at around 37 per cent. of its former par value. Subsequently its value in terms of sterling has remained fairly constant, but its gold value following the rather sharp depreciation in the latter currency which occurred in March 1935, has further diminished to roughly 30 per cent. of former parity.

At this point, therefore, it will be interesting to compare the devaluation of the yen in terms of gold with the similar devaluation of the English pound and of the American

dollar throughout the periods which have intervened since each of the countries concerned departed from the gold standard. The following figures, taken from the *League of Nations Statistical Year Book* 1933-4 and based on official computations, provide the comparison, indices being added for the corresponding movements of wholesale prices (to be referred to later) in the three countries:

	<i>Extent of devaluation</i>	<i>Wholesale prices (1914 = 100)</i>
GREAT BRITAIN:		
September 1931 . . .	..	99
October 1932 . . .	30.2 per cent.	101
January 1933 . . .	30.9 „	100
April 1934 . . .	37.7 „	103
Net price increase, Sept. 1931-April 1934 . . .		4 per cent.
U.S.A.:		
June 1933 . . .	..	93
April 1934 . . .	40.5 per cent.	105
Net price increase, June 1933-April 1934 . . .		13 per cent.
JAPAN:		
November 1931 . . .	..	111
October 1932 . . .	53.7 per cent.	134
January 1933 . . .	58.4 „	140
April 1934 . . .	64.2 „	134
Net price increase, Nov. 1931-April 1934 . . .		20.7 per cent.

Regarding the Japanese Government's future exchange policy little enough can be said with certainty. No attempt has yet been made to peg the yen at existing levels. On the other hand, a fresh outburst of speculation in the early months of 1933 inspired the passage of the Foreign Exchange Control Law in force since May 1st, 1933, which invests the Government with extremely wide powers for the control of foreign exchange dealings. It is, therefore, reasonable to suppose that unless the economic situation undergoes a radical change a deaf ear will be turned to the advocates of inflation, and that these powers will be employed in keeping the currency stable apart from ordinary seasonal fluctuations.

Probably enough has been said of the circumstances in which Japan reintroduced the gold embargo to convince the reader that any charge of devaluation for purely commercial ends would be difficult to sustain.

The existence of a decided advantage to commerce in the earlier period following the departure from gold is beyond question however. How far it still holds must be judged in the light of the facts now to be given concerning the extent of the counteracting effects of enhanced raw-material costs and of higher domestic prices reflecting themselves in increased manufacturing costs.

The opportunities which currency devaluation offered to Japanese manufacturers have not unnaturally been seized. To quote from a pamphlet issued by the Federation of British Industries in May 1933:

'The depreciation of the yen during the past year has been deliberately used to embark on a reckless national sales policy with disastrous results to British and other traders in various markets of the world.'

Japanese manufacturers had in fact accumulated stocks of raw material while the yen was yet on a gold basis and consequently were in a position to exploit the opportunity which presented itself with Japan's departure from the gold standard. While, therefore, the statement quoted above may be accepted as substantially correct, relating as it does to the year 1932, the authors of the pamphlet are on more debatable ground when in a subsequent passage they refer to 'the device of continuing exchange depreciation' as 'one of the deadliest weapons in a period of trade depression'. So long, of course, as internal costs have not fully responded to the lowering of the yen, currency depreciation may be said to assist the process of external expansion. Moreover, the increased yen cost of world-market raw materials does not directly affect Japan's international competitive power, in so far as the manufacturer of, say, cotton textiles will receive back as part of the export price paid for his goods a sum in his own currency equivalent to that which he originally paid for his raw cotton. In the long run, however, the rise in production

costs would be such as to neutralize almost all the benefit arising from depreciation, unless, as has been the experience of Great Britain, certain exceptional factors intervened to hinder the working of normal economic laws. Before, therefore, we can assert that currency depreciation will continue to prove a powerful instrument of Japanese trade expansion, we must consider whether such factors are present in Japan's case, and, if so, what is the extent of their operation.

With the single exception of silk reeling, the major exporting industries of Japan depend in varying degree upon imported raw materials. We should be enlarging the scope of our study unduly if we sought to estimate the effects of currency devaluation upon manufacturing costs over the whole range of these industries. For purposes of illustration it will be more convenient to confine our attention to the cotton textile group which depends almost wholly upon foreign countries for its supply of raw materials since not more than 1 per cent. of Japanese raw cotton requirements are at present being covered by colonial production.

According to calculations by Mr. Barnard Ellinger published in the *Manchester Guardian Commercial Supplement* for July 1st, 1933, the manufacturing costs in Japan of four standard brands of cotton cloth were made up as follows:

	'Dragon C.' per cent.	'Soldier' per cent.	'2 Geese' per cent.	'Tiger in Bamboo.' per cent.
Raw cotton . .	66	64	64	60
Labour costs . .	10	13	11	14
Other costs . .	24	23	25	26
Total . .	100	100	100	100

On the basis of the above figures we may assume raw material to represent on an average 63.5 per cent. of all manufacturing costs in certain important branches of the Japanese cotton industry. By approximately this percentage, therefore, the export bonus resulting from currency devaluation will have been offset by the rise in manufacturing costs consequent upon an increase in the price of im-

ported raw cotton. In Japan's case, however, this increase did not immediately ensue owing to the fact already mentioned that many Japanese merchants had accumulated stocks of raw material in excess of their immediate requirements. Not until these stocks had been exhausted was the effect of currency depreciation wholly reflected in increased raw material costs. At the same time the extent to which 'forestalling' purchases took place would seem to have been exaggerated in certain quarters, for in 1931 imports of raw cotton measured by quantity were only 10 per cent. greater than in the preceding year. Mention has elsewhere been made of the fact that the Japanese system of buying raw cotton entails as a matter of necessity forward purchases on a scale unapproached by other countries. The possession by Japanese spinners of large unconsumed stocks at the time of Japan's departure from the gold standard need not, therefore, be regarded as inconsistent with the normal Japanese practice whereby such stocks are at all times carried by the leading cotton-spinning concerns. It seems probable that a relatively small proportion must be accounted for by abnormal purchases deliberately made in order to forestall devaluation.

While currency depreciation automatically increases the cost of imported raw materials, its effect upon wages and other manufacturing costs is neither so immediate nor so easy to assess. We must, therefore, examine with some care the second factor tending to neutralize Japan's competitive advantage from the depreciation of her currency, namely the rise in domestic prices which would normally reflect itself in increased production costs for manufacture both in regard to overhead expenses and in regard to wages.

The first fact to elucidate is the reaction of Japanese domestic prices, wholesale and retail, to the fall in the foreign value of the yen.

While the course of the yen exchange since December 1931 has been progressively downwards, apart from minor fluctuations, this trend has never been fully reflected in wholesale and retail price movements. As in Great Britain, so also in Japan, the internal purchasing power of the

currency has not as yet adjusted itself to the new exchange value resultant upon departure from gold. The figures quoted on p. 95 show that during the first nine months, that is between November 1931 and August 1932, currency depreciation by 46 per cent. was only compensated to the extent of 16 per cent. by an advance in the general index of wholesale prices. The rise in prices was maintained, however, throughout 1932, reaching its climax in January 1933 when the index showed an advance of 29 per cent. Subsequently prices dropped, and in March 1934 had declined again to 23 per cent. above the November 1931 level, notwithstanding further currency devaluation, so that the gap between the external and internal values of the yen was wider than at any time since Japan reimposed the embargo on gold.

For this reaction in prices after the beginning of 1933, economic developments in the U.S.A. may be held largely responsible. The American banking crisis of January 1933 was reflected in a relapse of 6 per cent. in Japanese internal prices, and the fall in the exchange value of the dollar resulting from America's abandonment of the gold standard six months later has counteracted inflationary influences in Japan by diminishing the cost of imports from the United States, which comprise approximately one-third of all Japanese imports. Since the earlier date only retail prices, which are subject to diverse internal influences, have risen, and that only moderately.

A comparison of wholesale price-level movements in Japan with those in the United Kingdom and the U.S.A. and their correlation with the currency-value movements in the three countries has already been given.¹ Assuming the goods included in the wholesale price indices to represent preponderatingly the raw materials of industry, it may be deduced on a rough-and-ready calculation that in April 1934 Japanese manufacturers were paying on an average 17 per cent. and 8 per cent., in terms of gold, more for essential raw materials than their British and American competitors respectively.

¹ See p. 96, above.

Against this the yen depreciation exceeded by 26.5 per cent. the depreciation of sterling and by 23.7 per cent. that of the dollar. It may thus be argued that the yen was 9.5 per cent. and 16 per cent. undervalued in terms of these two currencies, and that to this extent Japan enjoyed an exchange advantage over Great Britain and the U.S.A.

To return to the main line of argument, we now have to examine the effect which the internal price movements described above have had upon Japanese production costs both in the form of wages and of overhead expenses. Japan has the advantage of importing only a small proportion of her foodstuffs, and in rice, the most important article in the diet of her population, she is practically self-supporting.

When, therefore, the yen outdistanced the fall in gold prices with the result that the wholesale price index¹ recorded a substantial advance, food prices did not, as a whole, share in the general rise, and the cost of living, as far as wage earners were concerned, remained comparatively stable. In order to estimate more accurately the potential effect of currency depreciation upon costs of living in the case of the industrial worker, we may refer to Mr. Morimoto's analysis relating to 'the minimum family expenditure per month required for the maintenance of an efficiency standard of living'. Basing his calculations upon the year 1931, the writer gives the following estimate of average expenditure and of its percentage distribution in the case of households within the 100-120 yen income group:²

	Cost (yen)	Per cent.
Food	40.92	35.42
Clothing	15.95	13.80
Housing	20.14	17.43
Fuel and light	5.16	4.47
Sundries	33.37	28.88
Total	115.54	100.00

¹ See table on p. 95.

² Morimoto, *The Efficiency Standard of Living in Japan*. Japanese Council, Institute of Pacific Relations, 1931.

Of these various items, food, housing, fuel, and sundries (which include taxes, education, recreation, and ceremonial expenditure) become dearer only to a minor extent as a consequence of devaluation, though the cost of clothing may be expected to reflect to some extent the increased cost of imported raw cotton and wool.

It is in the light of these data that we now come to examine movements in the cost-of-living index and of wage levels for Japan's industrial workers. These movements are illustrated by the following table based on estimates compiled by the Osaka Asahi and quoted by M. Maurette in his report to the International Labour Office on labour conditions in Japan and on figures taken from the general index of daily earnings for Japanese workers published in the *League of Nations Statistical Year Book* for 1933-4:

	<i>Daily earnings</i> 1927 = 100	<i>Real wages</i> Jan. 1932 = 100	<i>Cost of living</i> Jan. 1932 = 100
1932, March .	90	102.9	100.7
June .	87	99.0	98.2
September .	87	98.7	99.2
December .	92	105.1	102.3
1933, March .	92	104.5	101.8
June .	88	100.9	101.5
September .	89	101.1	101.7
December .	92	104.5	102.6

It will be observed that currency depreciation has not to all appearances produced a marked effect upon any of the three indices quoted above in spite of the fact that the retail price index shows a 19 per cent. advance over the level obtaining in November 1931. The limited extent to which Japanese workers depend upon imported commodities for the maintenance of their standard of life explains the stability of living costs, and so of wage levels. Even when full account is taken of the part which 'indirect' wages occupy in the total of wage costs, it is clear that currency devaluation has not increased wage costs to the manufacturer to any material extent. As regards 'direct'

wages alone the League of Nations' published figures are as follows:

General Index of Daily Wage Rates

					<i>Daily rates</i>
					<i>1927 = 100</i>
1932, March	.	.	.	.	89
June	.	.	.	.	88
September	.	.	.	.	88
December	.	.	.	.	87
1933, March	.	.	.	.	86
June	.	.	.	.	85
September	.	.	.	.	85
December	.	.	.	.	84

A comparison of this last table with the first column ('daily earnings') of the table on p. 102 appears to reveal a position in which, as compared with March 1932, the manufacturer is now actually paying less in direct wages for each unit of output, as is shown by the fall in daily rates, while the worker himself has been compelled to work either longer hours or at a higher pressure in order that his daily earnings may approximate to those which he was receiving three years ago. The factors which tend to depress wage rates so as to produce this result are discussed in a subsequent section.

There remain those other items which in Mr. Ellinger's analysis account for from 24 to 26 per cent. of total manufacturing costs and which include interest on capital, depreciation, maintenance, insurance, taxation, and power. The effect of currency devaluation upon overhead expenses of this nature are probably confined—in the earlier stages at least—to the two items of the cost of power and depreciation expenses. In the former case the extensive use of hydro-electric power in Japanese factories minimizes the use of imported fuel (imports of coal amount to some 12 per cent. of consumption and of this almost one-half is derived from sources within the Japanese Empire). In the latter case her imported machinery will, of course, cost her more and her considerable dependence upon imported iron ore may increase the cost of machinery produced in Japan and so

involve a heavier replacement bill. In any case, the enhanced cost of replacement of plant can be hardly a major factor in the manufacturer's budget, and we may come to the general conclusion that the effect of currency depreciation upon manufacturing costs will be limited in the main to the higher price which has to be paid for imported raw materials.

Having dealt at some length with the immediate effects upon Japanese industry and Japan's foreign trade of currency depreciation and the fluctuating value of the yen at home and abroad, we must now examine more generally Japan's financial structure as a whole, upon the strength or weakness of which her industrial future must to a great extent depend. In order to limit this examination within practical bounds, we may select as criteria of Japan's financial status two primary features of national finance, namely, the budgetary position and the national debt.

To appreciate properly the present budgetary situation we must look back over a period of years. The first post-war decade witnessed in Japan an extraordinary growth of public expenditure. Over a period during which the budget of almost every other country showed signs of contraction that of Japan came near to doubling itself, increasing from 1,172 million yen in 1919-20 to 1,815 million yen in 1928-9. Meanwhile internal prices had declined but little from the high levels attained during the War boom. Currency fluctuations were disorganizing foreign trade and the imminence of debt conversion operations in London and New York set a premium on financial orthodoxy. A number of considerations dictated therefore a return to the gold standard and there was general approval when Mr. Inouye took this step in 1929.

The next two years witnessed a reversal of previous financial policy and public expenditure was considerably reduced. The moment chosen for the deflationary process was, however, inauspicious, for in 1930 the depression intervened, followed a year later by the outbreak of hostilities with China. Faced with grave economic difficulties the nation attributed them, not without some modicum of reason, to Mr. Inouye's policy which, it became evident,

had proved itself untenable. In the following year, in circumstances described earlier in this section, the gold embargo was reimposed, and soon afterwards Mr. Inouye expiated with his life the imputed errors of his political course. Since 1931 the costs of the Manchurian campaign and of subventions for the emergency relief of agriculture have imposed an increasing burden on the national finances with the result that the budget total which from 1,815 million yen in 1928-9 had dropped to 1,476 million yen in 1931-2, rose steeply again to 2,309 million yen in 1933-4, the small surplus of 1931 being converted in the two succeeding years into a huge deficit. The last two budgets—those for 1934-5 and 1935-6—are only slightly lower at 2,301 million yen and 2,193 million yen respectively.

This rapid review of Japan's finances from the end of the Great War needs to be completed by some explanation of the causes of the growth of public expenditure since that period. A useful analysis is given by Professor Andreades in his book *Les Finances de l'Empire Japonais et leur évolution*, in which he enumerates four principal factors. These are, firstly, the persistence in peace-time of a mood of extravagance, encouraged by the prosperity after the War which led to the setting up of high standards of perfection for the various departments of government and of public life; next, the high rate of expenditure upon the army and navy amounting immediately after the War to very nearly 50 per cent. of the total annual budgets and involving a considerably higher sum than during the War itself; and finally, two further causes, one accidental and the other closely related to it. The former of these was the Yokohama Earthquake of 1923 which caused damage estimated at 5,506 million yen and at the same time paralysed much of the economic life of the country, while the second, arising partly out of the earthquake, was the financial crisis of 1927, due to ill-considered measures of financial assistance granted by the Bank of Japan and other public credit institutions to businesses which had been especially 'hard hit'. Drafts payable in devastated areas were rediscounted to the

extent of something like two milliard yen, and when, after the Suzuki failure, it became generally known that the great majority of these drafts were still outstanding, a financial panic ensued in which the Government was compelled to intervene and guarantee repayment by the semi-state banks of some 700 million yen. Though a general bank collapse was thus averted, it was at serious cost to the national exchequer.

In spite of the fact that during this pre-crisis period public expenditure had so greatly increased, the Government were able, owing to the growth of national wealth since 1914,¹ to find sufficient current revenue to balance the 'ordinary' budget, while the 'extraordinary' expenditure—mostly of a capital nature of definite economic value—was defrayed mainly from internal loans without undue inflation of the national debt.

Account must be taken, however, of the drain upon the taxable resources of the Japanese people which resulted from the heavy increase in local, as distinguished from governmental, taxation. Figures for the year 1926 given by Professor Andreades indicate a total of departmental and municipal taxes almost equal to the total of State taxes, and show *per capita* increases during the previous decade of 351 per cent. in the case of departmental taxation and 322 per cent. in the case of municipal taxation, compared with 231 per cent. in the case of State taxation.

In the circumstances just described Japan's budgetary position up to the beginning of the crisis displayed no obvious signs of strain, whatever it may have developed in the shape of hidden weaknesses. Since 1930, however, the position has seriously deteriorated. Primarily, of course, this is due to the universal economic depression, but is also largely attributable to important factors peculiar to Japan, prominent among which are the Sino-Manchurian affair and the complications arising therefrom.

¹ Between 1913 and 1924 the national wealth is estimated to have increased from 32 thousand million to 102 thousand million yen. (See Mori, *Estimates of the National Wealth and Income of Japan Proper*, quoted in Moulton, *Japan*, 1931.)

At an early stage of the depression the regular budgetary surplus had disappeared. Meanwhile 'extraordinary' expenditure, which had slightly exceeded 350 million yen in the two years 1930-2, jumped to 767 million yen for 1932-3 and to 944 million yen in 1933-4, leaving a deficit which could only be covered by borrowing.

Included under the heading of 'extraordinary expenditure' was a large part of the expenses of the Manchurian campaign and the very considerable sums voted for the emergency relief of agriculture in the form mainly of price stabilization for silk and rice as well as rural credits. The price-stabilizing scheme in respect of rice has proved unexpectedly expensive owing to abnormally heavy rice crops, and in 1934 is stated to have involved the Treasury in a loss amounting to 70 million yen.

Military expenditure in particular has become an increasing burden on the exchequer. The position in this respect can be shown as follows:

(In millions of yen)

	1935-6	1934-5	1933-4	1932-3	1931-2
1. Total expenditure .	2,193	2,301	2,309	1,950	1,477
2. Total army . . .	493	450	448	361	195
3. Total navy . . .	530	488	373	298	212
4. Total fighting services . . .	1,023	938	821	659	407
(4) as percentage of (1) . . .	46.6%	41%	36%	34%	25%

The growing expenditure on the fighting services finds its reflection in the annual budget deficits, as will be seen from the following table:

(In millions of yen)

	1935-6	1934-5	1933-4	1932-3	1931-2
Total expenditure .	2,193	2,301	2,309	1,950	1,477
Ordinary revenues .	1,336	1,422	1,291	1,287	1,315
Deficit to be made up by loans, &c. . .	857	879	1,018	663	162

According to present indications military and agrarian expenditure seems likely to continue to unbalance the budget, for Japan's insistence upon an increased naval ratio threatens to involve her in a programme of increased naval construction; the army vies with the navy in its demands for appropriations, and the economic condition of the farmers shows little sign of such an improvement as will permit the cessation of relief measures.

The question arises whether the rates and yield of taxation have reached, or are approaching, their practical limit. That the possibilities of tax raising are not entirely exhausted is indicated by the fact that a new tax on industrial profits, estimated to yield 30 million yen, is proposed by the Government; so long as the present relative business prosperity continues there is reason, moreover, for the Treasury to anticipate a natural growth in the yield of existing taxes. Any very substantial increase of the tax burden on industry would, however, be contrary to the fundamental Japanese policy of expanding the national industries to the fullest extent and would have to face opposition from powerful vested interests possessing a strong political 'pull'. At the same time the taxpaying capacity of the farmers is tending to diminish rather than increase. There seems, therefore, good ground for the often expressed belief that on the revenue-raising side the Japanese Government is nearing the end of its tether.

The practice of meeting very large budgetary deficits by means of heavy borrowing seems liable, then, to persist for some time. During 1933 loans were contracted amounting in all to about one milliard yen (including 186 million for Manchuria as against 289 million in 1932); in 1934 loans amounted to 900 million yen, and for 1935 it is proposed to raise something over 800 million. The influence upon future budgets of this growing dead-weight of debt is a darkening shadow on Japan's internal finances. So long as industrial prosperity continues, provided that the rural distress grows no worse, and on the presumption that the savings of the Japanese people remain readily available to finance fresh Government expenditure, the present borrow-

ing process may last for a time without precipitating a financial crash. But if trade should slump, or rural bankruptcy spread with a continuance of low agricultural prices, or, finally, should any event occur to destroy the confidence of Japanese investors, Japan could with difficulty avoid a collapse of her financial structure. Faced then with a dilemma which could be solved only by recourse to one of two expedients—drastic retrenchment or uncontrolled inflation—the Government would be impelled to adopt the latter course unless prepared to reverse their present policy of expansion.

To turn now to the second feature of Japanese State finance selected for treatment in this section, namely the national debt, we may begin by glancing rapidly at the progress of the national debt since the end of the Great War. Between 1919 and 1933 the debt was multiplied two and a half times. Until 1931 it underwent an average yearly increase of 276 million yen, but since that year a much more rapid advance has taken place, as is shown by the following table based upon official figures published in the *Japan Financial and Economic Annual* for 1935:

Direct Government Debt

(In millions of yen)

(External-debt figures calculated at old par, i.e.
yen = \$0.4985 = £0.1076)

	<i>March</i> <i>1934</i>	<i>March</i> <i>1933</i>	<i>March</i> <i>1932</i>	<i>March</i> <i>1931</i>	<i>March</i> <i>1930</i>
External Debt . .	1,415	1,390	1,473	1,479	1,447
Internal Debt . .	6,724	5,664	4,715	4,477	4,513
Total Debt . .	8,139	7,054	6,188	5,956	5,960
Increase or decrease over previous year .	+1,085	+866	+232	—4	..

These figures show that the Japanese Government has been able to finance its vast expenditure of recent years almost entirely out of internal resources. No new foreign

obligations have been incurred since 1924 and the total of foreign indebtedness outstanding at the end of 1934, namely 1,414 million yen, was actually less than in 1929. This position of independence of foreign financial centres is now obviously liable to change inasmuch as the cost of developing the immense new territories which have lately come under Japanese control can hardly fail to exceed the resources of her own capital market. It is generally recognized that the development of these territories will largely depend upon ability to attract thither a plentiful supply of foreign capital.

Japan has so far experienced little difficulty in transferring abroad her foreign debt service. Not only is her external debt itself a comparatively light one, but repatriation has been taking place on a considerable scale. According to an estimate quoted in the *Economist*, about one-half of all Japanese Government bonds issued abroad is now held by Japanese citizens domiciled in Japan. Japan's balance of international payments is on the whole a satisfactory one as will be seen from the table annexed to this chapter.¹ If invisible items, such as receipts from shipping and foreign investments, be taken into consideration, Japan may actually be a creditor on international account. Thus, in spite of currency depreciation, Japan does not appear to be faced with any vital difficulty in continuing to meet her foreign obligations, nor to have to fear a threat to her financial stability through pressure from foreign creditors.

The position as regards internal indebtedness is considerably less reassuring. The practice of borrowing to make good successive annual deficits has resulted since 1930 in a 50 per cent. increase in the internal debt, and it seems inevitable that further large capital sums will have to be raised before expenditure can be brought into line with current income. The essential question is, therefore, how far the Government can rely on the domestic capital market to continue to cover its annual requirements.

Looking at the immediate future a review of present

¹ See pp. 179 and 180 below.

monetary conditions in Japan suggests that, unless a crisis supervenes, ample resources should be available to supplement the deficiency of ordinary revenue over the next two years. There is at present no sign of real stringency, and, contrary to expectation, the pressure of military expenditure has not unduly inflated prices. The policy of cheap money, initiated under the Inukai Ministry in 1931, is still operative, and interest rates have continued to fall. Moreover, the recent rise in industrial profits referred to in Chapter I cannot fail to provide fresh funds for investment; although, therefore, the Bank of Japan may experience increasing difficulty in passing on Government stock to the public, there is no positive evidence that a point of saturation has yet been reached. This state of affairs cannot, however, be described as healthy or normal, and, notwithstanding the Government's resistance to inflationary tendencies,¹ the possibility of inflation cannot, in the view of many competent observers, by any means be left out of account. If inflation came involuntarily, it would be difficult to control and might easily be the prelude to the widespread financial collapse which the more pessimistic prophets have envisaged as the result of the heavy political commitments entered upon by the Japanese Government during the last few years.

3. *Characteristics of Labour and Labour Organization with special reference to the Japanese Cotton Industry.* Until recently it was the opinion of many competent observers that the cheapness of Japanese labour would prove illusory if wage costs for each unit of production, instead of direct money rates, were made the basis of comparison with other countries. In a contribution to the *Political Science Quarterly* made in 1929 and entitled 'An Analysis of Japan's Cheap Labour',² Mrs. D. J. Orchard estimated that nearly three times as much labour was being used in Japanese cotton mills as was required for the same output in America. Thus although the American worker received a daily wage four times the average Japanese wage for the same length of day, average American wage costs per pound of yarn

¹ See p. 96.

² *Political Science Quarterly*, vol. xliv, 1929.

were only 39 per cent. greater than the Japanese. She continues:

'The mills are overmanned; the labour is cheap but inefficient to a degree that greatly offsets its cheapness; extra labour costs reduce the margin of advantage still further; and there are some American mills, in spite of an average wage four times as high, that are producing at a lower wage cost per pound of output.'

In Lancashire also the higher average productivity of the British operative for many years went far towards neutralizing the competitive advantage in world markets which Japan enjoyed as a result of her generally lower scale of wages. We have therefore to consider at this stage how far the development of Japanese export trade in cotton goods in recent years has been assisted by progressive reduction in labour costs brought about by increased productivity on the part of the individual worker.

For reasons which we may briefly note the average efficiency of Japanese industrial workers is inclined to be lower than that of workers in the West. In the textile industries over 80 per cent. of the entire labour force has always consisted of young women and girls whose physical capacity is apt to be impaired by long hours and undernourishment. Conditions have greatly improved in the last decade or so, particularly in the larger mills, but it is open to question whether even now the diet provided for factory workers in Japan suffices to sustain bodily and mental powers to the same extent as among Western industrial workers.

In many Japanese industries, and more especially in cotton spinning and weaving, the turnover of labour is, furthermore, uneconomically high. This may be partly explained by the fact that, having been recruited in the vast majority of cases directly from the peasantry and not, as in the West, from a separate wage-earning class, the workers are bound to the soil by strong family and social ties and tend to regard their period of factory labour mainly as a means of securing temporary financial assistance for their families, or, in the case of women-workers, of providing a marriage-dowry.

Evidence of this high labour turnover is supplied by the

following figures (derived from a Japanese source)¹ which give a percentage grouping of workers according to duration of employment:

<i>Employed under</i>	<i>All Industries</i>			<i>Textile Industries</i>		
	<i>Male</i>	<i>Female</i>	<i>Average</i>	<i>Male</i>	<i>Female</i>	<i>Average</i>
5 years . .	41.0	71.6	57.5	56.2	71.9	69.1
5-9 years .	25.8	21.3	23.4	24.8	21.3	22.0
10-14 „ .	14.8	4.4	9.1	10.0	4.2	5.3
15-19 „ .	7.9	1.3	4.3	4.6	1.1	1.8
20-39 „ .	9.5	0.8	4.8	3.8	0.7	1.3
Over 40 „ .	0.2	0.0	0.1	0.1	0.0	0.0
Unknown .	0.8	0.6	0.8	0.5	0.8	0.5

In the 'under 5 year' group we find a percentage distribution as follows:

<i>Employed under</i>	<i>All Industries</i>			<i>Textile Industries</i>		
	<i>Male</i>	<i>Female</i>	<i>Average</i>	<i>Male</i>	<i>Female</i>	<i>Average</i>
Under 1 year .	10.9	18.5	15.0	16.1	18.0	17.8
1-2 years .	8.7	17.7	13.6	12.9	18.0	17.0
2-3 „ .	7.6	14.8	11.5	10.9	15.2	14.4
3-4 „ .	7.9	11.9	10.0	9.3	11.9	11.4
4-5 „ .	5.9	8.7	7.4	7.0	8.8	8.5

From these figures two noteworthy facts emerge—first the remarkably high proportion of workers whose term of employment does not exceed three years' duration—namely 40.1 per cent. for industry as a whole and 49.2 per cent. for textiles—and secondly the relative impermanence of female workers as compared with males, clearly shown by the far higher proportion of males included among those employed for ten years and over. On the not unreasonable assumption that it takes from three to six months for an operative to acquire a normal degree of proficiency (even when machinery is of a semi-automatic type), it is clearly arguable that Japan's high labour turnover has militated

¹ Census of Labour, 1927, quoted by Mr. Isoshi Asahi in *The Secret of Japan's Trade Expansion*, p. 66 (Tokyo, July 1934).

against the development of a large class of permanent skilled workers and hence of a high efficiency standard. Conditions in this respect are, however, liable to be changed either by a progressive worsening of the agrarian crisis which would force increasing numbers on to the labour market without the possibility of reabsorption in agriculture, or conversely by such an improvement in working conditions as would tempt workers to remain permanently. Either contingency would almost certainly lead in time to the growth of a separate industrial proletariat, constituting a reserve of more-or-less skilled labour.

It is largely due to reasons connected with labour that the striking efficiency of certain Japanese industries has in many cases been of such recent date. In cotton weaving the cheapness of labour formerly retarded the adoption of technical improvements such as the automatic loom, since it was long believed that an equivalent advantage could be gained more economically by employing more workers to speed up existing plant and to extend hours of work. This policy was modified, however, as it became clear that in practice it tended to defeat its own end, for not only were both the quality and quantity of output *per capita* inclined to deteriorate with the lengthening of working hours but also the necessity to maintain and house a growing body of workers involved increasingly heavy indirect wage costs. If, therefore, the history of Japan's industrial development be viewed in perspective, the great disparity between the cost of capital equipment and that of labour is revealed as the factor which deferred the attainment of higher efficiency. It was not until profits accumulated during the War had enabled Japanese concerns to re-equip themselves with improved machinery that Japan's vast reservoir of cheap labour could be converted from a potential into a real asset and Japanese competition in world markets become a factor to be reckoned with. The process of rationalization begun shortly after the War was further hastened by the compulsion to reduce costs resulting from the official deflationary policy pursued between 1927 and 1930, and by the law of 1929 which limited night work for women and

children, thereby necessitating more efficient methods of production to compensate for loss in working hours.¹

The first fruit of rationalization was seen in Japan's ability not only to maintain but actually to expand her exports of cotton piece-goods at a time of acute world depression. Her cotton industry naturally became, therefore, a primary object of study on the part of foreign investigators anxious to discover wherein lay the success of her industrial methods, and despite the existence of several factors which, for reasons shortly to be explained, must tend in some degree to falsify any direct comparison of Japanese labour costs with those of another country, enough data have now been accumulated as a result of research such as that undertaken by Mr. and Mrs. Orchard, Mr. Arno Pearse, and Miss Utley² to allow of certain tentative conclusions regarding the relative cheapness of Japanese labour at the present time in those branches of her textile industry which particularly compete with the West.

But first let us see what the circumstances are which tend to falsify a comparison such as that which we are about to attempt. In the first place there is the difficulty of obtaining reliable statistical data on many aspects of the very complex subject under review, as a result of which it has been necessary to rely extensively upon the result of individual observation and research. This, however conscientiously and patiently it is carried out, cannot be entirely satisfactory, for within almost every Japanese industry the most various conditions still exist side by side, and it is rarely possible for the isolated observer to obtain a genuine cross-sectional view; the student of Japanese conditions is therefore always liable to experience difficulty in correlating expert testimony in such a way as to present a coherent picture.

¹ 'Night work.—Under section 4 of the Factory Act the employment of young persons under sixteen years of age and of women is prohibited from 10 p.m. to 5 a.m. The employment of such persons until 11 p.m. is, however, permitted with the sanction of the administrative authorities and almost all cotton-spinners have sought permission to use this exception.' International Labour Office: *Industrial Labour in Japan*, 1933, p. 185.

² Orchard, op. cit.; Pearse, op. cit.; Utley, *Lancashire and the Far East*, 1931.

Another factor to be borne in mind is that in the case of foreigners, facilities for study have not generally extended far beyond the larger factories in which both working conditions and labour efficiency are almost certainly above the average. An international comparison of costs will be to some extent vitiated, however, if it does not take into account the innumerable small factories and workshops which also manufacture goods for export, and where a far higher ratio of labour costs to total manufacturing costs continues to prevail. Subsequent references will be made to these latter; at this point it will be enough to emphasize that the participation in the export trade of a number of small units, where working conditions, wages, &c., differ widely from the norm which applies to the larger factories, is a disturbing and rather incalculable element in our comparison.

Having entered a caveat on these points, we must further take into account the more fundamental difficulty of calculating the heavy additional charges supplementary to wages imposed upon the Japanese manufacturer by obligations toward his work-people, which it is customary for him to assume in a spirit of paternalism, and which include the payment of semi-annual, maternity, and discharge bonuses in addition to the performance of welfare services of various kinds. It is the widely variable nature of these extra labour costs which renders an accurate estimate of real wages in Japan so extremely difficult, and some reference to their origin and probable present extent seems therefore to be called for.

Owing to the reluctance of the Japanese population to abandon traditional modes of life, the earlier stages of Japan's industrial development were associated with great difficulties in the recruitment of factory labour. Workers had often to be brought long distances from their homes, and when, as was usually the case, suitable accommodation near the factory was not available, the employer had no choice but to take upon himself a major responsibility for their welfare, adapting to modern industrial conditions those principles of paternalism, which under the 'family

system' had traditionally governed the relationship of craftsman and apprentice. Out of the peculiar circumstances attending the industrial transition in Japan arose, therefore, an elaborate system of grants and services undertaken by the employers without legal obligation, but acquiring with the passage of time an almost contractual sanction. To this day workers are to a great extent housed, fed, medically attended when sick, and even educated at the expense of their employer. It is true that a small sum is deducted from wages as a contribution towards the cost of meals supplied by the factory but the various other services included under the heading 'welfare' would seem in almost every case to constitute a charge entirely borne by the factory owner.

Mrs. Orchard estimated some years ago that 61 per cent. of all textile workers were housed in factory dormitories. For Japanese factory industry as a whole the total was 42 per cent. Although in certain industries the tendency is now for workers to be recruited increasingly from a free permanent labour force living in their own homes, these estimates probably require only slight modification to-day, and there can be little question that the dormitory system with its various adjuncts alone represents an important extra labour cost to many manufacturers.

To judge, however, by the results of an inquiry initiated in 1931 by the Japan Industrial Club, voluntary allowances of various kinds (i.e. discharge and retirement allowances and long service bonuses) account for by far the largest share of indirect wage costs. In the first half of 1931 these apparently made up 63.2 per cent. of the total, whereas 'dormitories and living quarters', the next largest item, amounted according to the same estimate to no more than 14.5 per cent., followed by medical and hospital expenses, representing 7.5 per cent., education 3.1 per cent., amenities 2.2 per cent., &c.

At the same time no common standard of practice prevails, and it is normal to find expenditure under all these heads varying widely from factory to factory according to the size and resources of the concern in question. As a rule

it is higher in the large 'modern' factories than in the small units, but exceptions are not infrequently met with. As Miss Utley had occasion to discover, standards in the remoter country districts often fall far short of those set by the mills most generally open to foreign inspection.

Obviously no precise estimate of Japanese wage costs is possible when, for the reasons we have mentioned, the real cost of wages—inclusive of bonuses, welfare, and the costs incidental to recruiting workers from the countryside—may be anything between 30 per cent. and 50 per cent. more than is apparent from the money rate. In so far, however, as we are considering the textile industry specifically, the addition to the money wages bill necessitated by indirect wage costs is held by the most reliable authorities to lie nearer to the lower of these two limits, i.e. approximately 30 per cent.

Before leaving this somewhat controversial subject, it is only fair to point out that the importance of the welfare work undertaken by Japanese industrialists as a factor in the cost of labour is held by some observers to have been frequently misrepresented. It is argued that the continuance of welfare work on a large scale is chiefly necessitated by the slow development in Japan of those social services which in advanced Western communities are ordinarily undertaken by the State or by the municipality. In the words of Miss Utley, 'the British manufacturer's rates and his health and unemployment contributions are certainly a heavier financial burden than all the welfare work of the Japanese mill-owner'.¹ Whether we accept this opinion or not, there is no denying that, on the average, the rates paid by the Japanese manufacturer are very much lower than those levied upon his British counterpart, while the system of unemployment insurance in force in Great Britain has no parallel in Japan.²

¹ Utley, *op. cit.*

² State health insurance has existed, however, since 1927, and in 1930 embraced 81 per cent. of the total factory and mining population. Apart from certain professions classified as dangerous, employers' contributions are equivalent to 2 per cent. on wages, a further 2 per cent. being contributed by the worker. See *Industrial Labour in Japan*, pp. 274-9.

We have now seen the extent of the difficulties which exist in making valid comparisons between labour costs in Japan and in Great Britain or any other manufacturing country. With this warning in mind we may examine the data available for such a comparison.

The remarkable decline in manufacturing costs which has taken place in the Japanese cotton industry during the past decade, and more especially since 1929, may be ascribed partly to measures of rationalization which reduced the number of workers required to operate a specified number of spindles and looms and partly to a fall in wages, estimated between 1929 and 1933 at 35 per cent. for spinning and 32 per cent. for weaving. The effects of rationalization are well illustrated by the following tables¹ based upon statistics relating to mills affiliated to the Japan Cotton Spinners Association. Parallel figures representing average daily wage rates (based upon those given in *The Financial and Economic Annual of Japan*) have been added. Some further elucidation of these will be found in the footnote to page 120.

Situation relating to the increase of efficiency in cotton spinning mills

(1925 level = 100)

<i>Average total no. of workers per diem</i>					<i>No. of female workers per 10,000 spindles</i>	<i>No. of spindles per female worker</i>	<i>Daily output per female worker lb.</i>	<i>Average daily wage per female worker² yen</i>
<i>Year</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Index</i>				
1920	33,966	109,782	143,748	82.8	344	29.1	18.94	1.10
1925	39,221	134,383	173,604	100.0	288	34.7	18.13	1.16
1928	36,355	117,697	154,052	88.7	243	41.2	20.83	1.13
1929	35,223	124,449	159,672	92.0	215	46.5	22.44	1.17
1930	30,202	108,981	139,183	80.2	185	54.1	23.17	1.07
1931	23,661	98,008	121,669	70.1	166	60.2	26.19	0.89
1932	21,154	105,651	126,805	73.0	167	59.7	26.60	0.79
1933	19,295	110,129	129,423	74.6	173	61.2	28.15	0.75

¹ Reproduced from *Far Eastern Social Information*, Tokyo, Oct. 1934.

² See footnote on p. 120.

*Situation relating to the increase of efficiency in cotton
weaving factories*

(1925 level = 100)

Average total no. of workers per diem					No. of female workers per 1,000 looms	No. of looms per female worker	Annual output per female worker yard	Average daily wage per female worker ¹ yen
Year	Male	Female	Total	Index				
1920	8,005	39,048	47,053	84.4	875	1.14	19,515	0.85
1925	8,703	47,023	55,726	100.0	747	1.34	25,083	0.97
1928	8,259	35,446	43,705	78.4	502	1.99	38,989	1.01
1929	8,484	34,208	42,692	76.6	498	2.01	44,967	0.99
1930	7,396	27,956	35,352	63.4	429	2.33	49,664	0.87
1931	5,817	23,024	28,836	51.7	358	2.80	61,008	0.76
1932	5,379	25,015	30,394	54.5	368	2.72	61,277	0.70
1933	5,296	29,013	34,309	61.6	392	2.55	57,694	0.67

¹ It may be found of interest to compare the above with average daily wages in other leading Japanese industries, published in the official *Financial and Economic Annual of Japan* for 1934, e.g.

Type of Employment	1929 yen	1933 yen
Silk reeler (female)	0.97	0.67
„ weaver „	0.99	0.80
Hosiery knitter (male)	1.63	1.45
„ „ (female)	0.91	0.72
Founder	2.35	2.18
Potter	1.92	1.74
Glass maker	2.09	1.70
Match maker (female)	0.68	0.49
Daily labourer (male)	1.93	1.28
„ „ (female)	0.99	0.74
Fisherman	1.74	1.44
Brewery worker	1.93	1.79

The wage figures, published in the annual *Economic and Financial review of Japan*, are based upon average earnings. These include over-time and night work payments, bonuses for quality of work or output, and certain allowances in respect of food. They do not include either unemployment, sickness, discharge and retirement allowances, or contributions towards living expenses in the shape of clothing, lodging, &c. The average cost, to the employer of all payments supplementary to wages has been estimated at 36 yen per head—a figure based upon statistical data compiled in 1932 by the statistical bureau of the Japanese Cabinet, and relating to 2,267 Japanese concerns.

Basing our calculations on the above figures we find that between 1929 and 1933 the total direct labour cost per bale of yarn (400 lb.) declined by approximately 50 per cent. from 20·8 to 10·6 yen, and per 100 yards of cloth woven by 48 per cent. from 69 to 36 yen (assuming the year to contain 312 working days). An estimate derived from a highly reliable source shows that over the same period total manufacturing costs (i.e. all except cost of raw cotton) for spinning '20' counts fell from 43·70 to 27·06 yen per bale; thus in the case of spinning a 50 per cent. reduction in labour costs compares with one of 38 per cent. in total costs, wherefrom it may be inferred that overhead costs fell less steeply than those of labour; the actual decline in the former (which may be taken as including the cost of fuel, power, depreciation, freight, taxes, and all management expenses) works out at 22 per cent. on the basis of figures given above.

In contrast to the experience of Japan, the ratio of labour costs to total production costs had in Great Britain remained almost stationary up to 1929. Figures given in the report of the Balfour Committee on Industry and Trade show how little the percentage distribution of production costs in Lancashire was altered in the earlier post-war period:

Lancashire (American Cotton)

	<i>Pre-War period</i>	<i>Post-War period</i>
Materials . . .	76·2	73·2
Wages . . .	12·7	12·8
Other expenses . .	11·0*	14·0*
	100	100

* Including interest on capital.

According to calculations made by the Statistical and Economic Department of the Joint Committee of Cotton Trade Organizations, Manchester, the labour cost for Great Britain of spinning '20' counts worked out in 1931 at 0·97d. per lb. The corresponding figure for '40's' was 1·92d. per lb. These costs would be slightly lower to-day in view of the fact that wages in the spinning section have since 1931 been reduced by about 13·6 per cent. At a

rough computation the present British wage cost per bale, '20's' and '40's', may be reckoned at £1 8s. and £2 15s. respectively. The Japanese figure of 10.6 yen per bale (equivalent to £1 1s. 2d. at par) given on p. 120 may be presumed to be based on an average of all counts spun by mills affiliated to the Japan Cotton Spinners Association. The present labour cost of spinning '40's' in Japan has been estimated by the Mitsubishi Economic Research Bureau at £1 7s. 1d. per bale¹ (converting the yen at mint par). If this figure is approximately correct, then the labour cost of spinning '20's' in Japan will probably now be in the neighbourhood of thirteen shillings per bale. In tabular form the figures are as follows:

Approximate wage cost per bale based on year 1933
Yen converted to sterling at mint par

	'20' counts	'40' counts
	£ s. d.	£ s. d.
Great Britain	1 8 0	2 15 0
Japan	13 0	1 7 1

In the weaving section of the cotton industry the gain in efficiency by Japan has been no less remarkable. Although the actual year's output per female worker was slightly lower in 1933 than in the two preceeding years, owing most probably to an increase in short-time working,² it was still greater by about 28 per cent. than in 1929, while total wage costs were down by nearly 50 per cent. Over the same period Lancashire has also benefited by some reduction in labour costs, though of course not nearly to the same extent as Japan. We may, however, reckon the combined saving in labour costs which has accrued to the Lancashire industry from wage cuts and, since 1932, from the operation of the 'more looms to a weaver' agreement, as being in the region of 20 per cent. A detailed comparison of weaving costs in the two countries would be incomplete without an investigation into the associated processes of cloth-carrying, sizing, &c. In the absence of space in which to attempt this, we

¹ See *Monthly Circular*, No. 116, June 1933. ² See table on p. 120.

must confine ourselves to a very brief statement of the present position. It will suffice perhaps to indicate that in 1929 Miss Utley showed average Japanese labour costs in spinning to be, very approximately, two-thirds of the corresponding Lancashire figure.¹

If, as already observed, weaving wage costs in Japan and in Lancashire declined by 48 per cent. and 20 per cent. respectively between 1929 and 1933, and if Miss Utley's estimate of their relative position in the earlier year is not far wide of the mark, we may infer that to-day, in weaving as in spinning, Japanese wage costs must in all probability be rather less than half those current in Lancashire.

Having pointed out that in the combined process of spinning and weaving direct labour costs in Japan for each unit of production probably now amount to less than half the corresponding British figure (we refer, of course, to piece-goods woven from low and medium counts, since these must long continue to be the staple export lines of both manufacturing centres), we may next turn to consider whether Japan possesses an equivalent advantage in regard to working expenses and overheads. Owing to the incidence of bonus and welfare costs and likewise to heavier capitalization,² it has sometimes been suggested that these items weigh more heavily upon the Japanese spinner than upon his British counterpart. To prove this conclusively is difficult, however, for the British spinner has onerous burdens from which the Japanese spinner is virtually exempt. These include liabilities to creditors in the form of debenture debt and to the municipality in the form of rates. Moreover, office expenses, agent's and middleman's commission, and freight are all factors entering into the final cost of cotton goods wherein the Japanese system

¹ Utley, *op. cit.*, p. 223.

² The following figures represent the approximate capital cost at the present day of erecting a ring-spinning mill (i.e. the cost of machinery, land, and buildings):

Lancashire . . .	£4 per spindle •
Japan . . .	£6 " "

(Particulars furnished by the Joint Committee of Cotton Trade Organizations.)

shows a definite saving over the British. In a useful comparison of total costs in Japan and Lancashire for which Mr. Barnard Ellinger is responsible,¹ the item designated 'other costs' is shown on an average to be slightly higher in the case of Lancashire than in the case of Japan. Although, as explained in the note accompanying the figures in question, the basis of calculation has not been entirely the same in each case, the fact clearly emerges that the actual disparity between the two countries as regards 'overheads' and working expenses is a trifling one.

Leaving the question of wages and labour costs, in so far as it relates to Japan's most important factory industry, we may conclude with a reference to one or two general features of the Japanese labour situation.

In the matter of hours the larger establishments now conform more or less to Western standards; small undertakings, on the other hand, usually work 10 or 11 hours a day and sometimes even more. In the course of his recent tour, M. Maurette² was able to verify that most of the

¹ *Comparison of Japanese and Lancashire Costs.*

(Pence per piece) (a)*

	Dragon C		Soldier		2 Geese		Tiger in Bamboo	
	U.K.	Japan	U.K.	Japan	U.K.	Japan	U.K.	Japan
Raw cotton cost (b) .	63.5	63.5	72.0	72.0	56.0	56.0	42.5	42.5
Labour cost (c) .	27.9	9.9	35.2	14.4	25.5	9.2	23.0	9.8
Other costs (d) .	25.0	22.5	29.2	26.7	25.5	21.8	19.9	18.8
Total . . .	116.4	95.9	136.4	113.1	107.0	87.0	85.4	71.1
Per cent. of Japanese cost . . .	121.4		120.6		123.0		120.2	

Notes.

(a) Japanese costs are converted to sterling at 24*d.* to the yen.

(b) Cotton for Dragon C and 2 Geese is Fine Bengal, price 4.40*d.* per lb. 18 per cent. waste loss, 6 per cent. regain. Cotton for Soldier and Tiger in Bamboo is pass American, price 5.63*d.* per lb. 15 per cent. waste loss, 6 per cent. regain.

(c) Lancashire labour costs are for a 6-loom system in weaving, and exclude labour costs in sizing, cloth-carrying, &c., in weaving, which are included in 'other costs'.

Japanese labour costs include all processes up to weaving, and apply only to 1931.

(d) See note (c).

* Ellinger, 'Japanese Competition with Lancashire: Comparisons of Cotton Trade Costs' (in the *Manchester Guardian Commercial*, July 1st, 1933, p. 3).

² Maurette, F., *Social Aspects of Industrial Development in Japan* I.L.O. 1934.

factories visited by him enjoyed more favourable conditions than those provided for in Article 9 of the Washington Hours Convention¹ despite the fact that the Convention has never yet been formally ratified by Japan. It must be borne in mind, however, that M. Maurette, as he himself admits, had little opportunity to investigate any but the larger enterprises representative of Japanese industry in its most modernized forms. The conditions described by him cannot be regarded as typical of the country as a whole, since 60 per cent.—according to the 1930 census—of Japan's industrial population still gains its livelihood in a multitude of small undertakings employing not more than five workmen apiece.

On this and other accounts we must seek to define the part played in Japan's economic life by the small independent manufacturer. Such conclusions as we may reach will necessarily be somewhat tentative owing to a lack of reliable statistical evidence,² but our object will have been achieved if we succeed in indicating to the reader certain tendencies which many students of Japanese economic conditions now regard as profoundly significant.

Commenting on the dualism in Japan's economic structure which results from the coexistence of large-scale modern industry with primitive handicraft and trade conducted along traditional lines, the author of a series of articles recently published by the *Spectator* writes as follows:³

'The old structure of agriculture, primitive handicraft and petty trade, in which far the greatest part of the population still lives its economic life to-day, could not but lag more and more behind the hastily erected superstructure of modern industry, transport trade and banking. There has never been time to unify the two Japans,

¹ Article 9 of the Convention prescribes for Japan a maximum working week of 57 hours for workers over 15 years of age and the observance of a weekly rest period of 24 consecutive hours.

² Since these pages were written, interesting particulars relating to the activity of small producers have been made available by the Ministry of Commerce and Industry. Some of them are reproduced in the Department of Overseas Trade report on *Economic Conditions in Japan 1933-4*, No. 604, pp. 39-41.

³ 'Japan and the World' (in the *Spectator*, Oct. 26th, 1934).

which live side by side all over the country. They are, indeed, drifting more and more apart.'

While factory industry may be regarded as an extraneous development in Japan in so far as it has not hitherto been attended by profound social and economic changes comparable to those which resulted from Great Britain's Industrial Revolution, it is probably wrong to infer, as does the author of the above passage, that the two systems do not overlap at any point. Despite the apparent cleavage between them, signs of interaction are not lacking. Competition from factory products is, for example, causing the decay of many traditional handicrafts and home industries, such as the manufacture of Tabi (Japanese socks), Shoyu (soya bean sauce), and iron utensils. In other directions, however, a reverse process has been set in motion by the fact that the small producer is ceasing to move in his traditional groove and is turning his attention to the production of goods which bring him into competition not only with industries in his own country but also with those of the West.

Primarily the small Japanese manufacturer has always catered for the domestic market, and the evolution which his business is now undergoing in many directions has consequently been forced upon him by a change in the character of local demand occasioned by the increasing diffusion of Western tastes and ideas throughout the country. A contributory factor has been the spread of electricity, which has enabled the small manufacturer, despite his lack of capital, to show a high degree of adaptability in the face of changing conditions while retaining the 'family' organization traditional to small-scale Japanese enterprise.

The output of workshops formerly engaged in the manufacture of highly specialized goods for domestic consumption such as lanterns, umbrellas, sandals, and so forth, now includes electric bulbs, bicycle parts, fountain pens, rubber shoes, and many other articles which more especially since the earthquake of 1923 are beginning to find favour with the Japanese masses. Such articles are not necessarily destined only for home consumption. Unlike the specifi-

cally 'Japanese' goods which they tend to supersede, they are essentially suitable for export to other countries, so that the 'westernization' of popular taste in Japan has incidentally opened up to the small producer entirely new areas of potential demand and endowed his activities with possibly unexpected relevance to the main theme of our study.

To understand the significance of this trend, it is necessary to realize the wide gulf as to labour conditions which separates the larger enterprises from the small workshops employing ten hands and under. The small 'shop' is the home of Japan's so-called 'family system' in an almost literal sense, the nucleus of such businesses being as a rule the family group which, assisted by a certain number of outside apprentices, supplies all the necessary labour. Whatever regular remuneration the workers receive beyond free food and accommodation, often of the scantiest kind, is infinitesimal except in the case of those whose work is of a highly skilled nature. Where fewer than ten workers are employed the undertaking, unless it possesses a power machine,¹ is outside the scope of factory legislation and therefore altogether immune from inspection. In such cases no check exists upon 'sweating', and hours for all classes of labour, women and children as well as men, are entirely unregulated. The undoubted improvement in working conditions observed in the larger factories has little or no counterpart where 'family' industry is concerned. Instead, unbridled competition involves the small independent manufacturer in a continuous struggle to reduce costs of production. This, in turn, drives him to depress conditions of labour still further, so that he is finally caught within a vicious circle.

The precarious situation of the small producer is now engaging the attention of the Government, and under official auspices some progress has already been made towards linking up the scattered forces of family industry by means of price agreements and centralized selling agencies. A further line of development lies in the possi-

¹ All workshops which have a power machine are subject to inspection irrespective of the number of workers employed.

bility of increased co-ordination with existing branches of factory enterprise. This has already proved practicable in several industries, a conspicuous example being the bicycle industry, in which components are now being manufactured in small workshops on a contract basis and subsequently sent to the larger factories for assembly. Whatever form it takes, however, the eventual reorganization of family enterprise on more economic lines, no less than the process of 'westernization' now affecting many of its branches, seems destined to result in a much more systematic attempt to exploit in the export field the potentialities of cheap family labour. Already many miscellaneous articles of the kinds mentioned as typical products of the small Japanese undertaking command a widespread sale in areas of low purchasing power; at this stage, however, we cannot do more than indicate the probability that as family industry develops further along the lines suggested both the quantity and the variety of such goods entering foreign markets will substantially increase.

A final word may be added in order to illumine the Japanese method of approach to problems associated with industrial relations. In small enterprises, such as we have just described, 'paternal' relations are naturally fostered between the master and his workmen by close personal contact. With the change of scale in industry resulting from the rise of a modern capitalist economy, this traditional relationship has been obscured without any fundamental change of outlook as far as the majority of Japanese workers are concerned. Feudal concepts of mutual responsibility and duty, deriving from an epoch in which the family was the natural unit in all social and economic affairs, have simply been carried over into modern industrial life, where they underlie much of the welfare work undertaken by Japanese manufacturers for the benefit of labour. The docility, which many observers have noted in Japanese workers, has its root here. Thus in jealously preserving the feudal element in industrial life while suppressing all manifestations of a more independent spirit, the employer is pursuing a policy of enlightened self-interest.

The menace of industrial unrest does not at present loom very large upon the Japanese horizon, for—although there may not be general concurrence with the view powerfully urged by some Japanese industrialists that assumption by the employer without legal requirement of certain obligations towards labour makes it possible to dispense largely with factory and social legislation—the concept of paternalism with all that it implies of loyalty and obedience on the one hand, privilege and responsibility on the other, appears to find instinctive acceptance among the great majority of Japanese workers. Labour disputes, it is true, have tended to grow more frequent in recent years, but apart from occasional communist manifestations, they have been provoked rather by sporadic abuses of the existing system than by any widespread dissatisfaction with that system as a whole. No observer of Japanese social conditions would deny that the feudalistic character of Japanese society accords well with her peculiar needs as an industrial power, for it is generally conducive to harmonious relations between capital and labour, while enabling the industrial structure as a whole to retain a considerable degree of elasticity in the face of changing circumstances.

The weakness of the Japanese unions may be traced to a number of distinct causes, but undoubtedly the chief obstacle with which they have to contend is an impalpable one, arising out of the national bias in favour of paternalism. Although the *Japan Year Book* for 1933-4 gives the total number of unions as 932, not more than 10 per cent. of all registered workers are union members. Of the various labour categories, transportation workers, and more especially seamen, show the highest proportion of union membership. In the factories, on the other hand, the unions embrace a comparatively small minority of the workers engaged, for not only are welfare services here more highly developed but, as we have already noticed, a majority of those employed are young girls, who, even if other disabilities were not placed in their way, would have little inducement to join the unions since their period of factory labour is usually of such short duration.

Other factors tending to hamper the unions are the absence of official recognition and disagreement among themselves as to political and social aims. In 1928 a measure was drafted by the Government which would have removed the first-named disability, but owing to opposition on the part of employers it has never yet reached the statute book. Governmental recognition is, however, only a matter of time, whereas the sources of internal dissension may well prove permanent inasmuch as questions of principle are involved. The moderate unions are, for example, strongly imbued with nationalist sentiment which leads them to devote much of their energy towards rebutting communism wherever it raises its head. The left wing unions on the other hand, although varying in political complexion from orthodox marxism to crude anarchism, are all more or less subversive in tendency. The mutual antagonism of these two groups exercises a crippling effect upon the movement as a whole, and, in the past at any rate, has given rise to the assertion that the Japanese unions are more preoccupied with political questions than with the immediate betterment of social conditions.

(c) *Population, Raw Materials, and Food-supplies*

It is a matter of more or less general agreement that the present urge towards industrialization observable in Japan derives its main force from over-population. As Professor Penrose¹ has emphasized in his recent book, however, the term 'over-population' is essentially relative. To attribute social and economic tendencies to such a cause is clearly insufficient unless at the same time we indicate the sense in which the term can be said to apply to the particular state or region we are discussing. If, for example, a rising level of *per capita* income can be taken as evidence that over-population does not exist—and this view has the support of several leading economists—then, as far as available information goes, there is no justification for regarding Japan as over-populated. Professor Penrose

¹ Penrose, *Population Theories and their Application*, Food Research Institute, Stanford University, 1934.

rejects this latter definition, however, in favour of one which makes real income the necessary criterion, and by real income is implied that proportion of gross *per capita* receipts which is available for the purchases of food, clothing, and other commodities contributing directly to economic welfare. Applying this criterion to Japan, we observe that the level of economic welfare attainable on a given gross income is rising gradually in the case of industrial workers, but where farmers are concerned, it is falling. Although the decline in the *per capita* economic return from farming has no doubt been accentuated by temporary factors, it must, in the opinion of the leading authority referred to above, be attributable primarily to the state of over-population prevailing in agricultural areas. Regarded in this light, Japan's population problem exists not in any absolute sense but rather as the result of an internal maladjustment requiring for its solution the establishment of a different equilibrium as between agriculture and other occupations.

As will be pointed out later in this chapter, the possibilities of enhancing the fertility of the soil through more scientific methods of cultivation and so of raising the economic return from farming are probably not yet exhausted. It becomes increasingly apparent, however, that such possibilities cannot be fully realized without reform of the land system, involving some reduction in the number of those now engaged in agriculture. In any final analysis, therefore, Japan's population problem resolves itself into one of creating alternative openings for labour which can no longer be utilized economically in farming, fishing, and kindred pursuits. To quote Professor Penrose:¹

'... it may be said that the available evidence, though incomplete, points on the whole to an improvement in the economic position of the Japanese people during the period in which the population has rapidly increased, and that to-day the average Japanese is much better off than was the average Japanese when the population was only half its present size. But there are indications of the existence of agricultural over-population, and agriculture cannot be expected

¹ Penrose, *op. cit.*, p. 272.

to absorb new workers to advantage beyond those needed for replacement purposes; in fact, gains in the productivity of agriculture would probably result if the total number of workers employed in it were reduced. It follows that industry and commerce are the main channels into which additions to the working population tend to be drawn. Industrialization will have to be progressively extended in Japan in the near future.¹

While it is mainly through development of industry that Japan aims at effecting the economic readjustments which are necessary if she is to rid herself of agricultural overpopulation and so to secure the maximum of economic welfare for her people, the possibility of increased absorption by 'indirect' services¹ ought not to be overlooked. The extent to which such services can normally be developed is strictly limited, however, and after their rapid expansion

¹ To judge by facts set forth by the Tokyo Association for Liberty of Trading in their Bulletin No. 3, dealing with occupational changes in Japan, there was between 1920 and 1930 an increase of employment in the three occupational groups classified as Trade, Public and Professional Service, and Domestic Service which went far to absorb the natural growth of population during that period and so to prevent any serious aggravation of the unemployment problem. The following passage from the above-mentioned publication may be quoted in full: "Thus, while the total population increased 14 per cent., the increase of the persons engaged in trade reached 39 per cent. (1,317,000) and that of the persons in public and professional service 37 per cent. (541,000). The increase in domestic servants was not so great, but amounted to 21 per cent. (140,000). These three groups together showed an increase of almost two millions, far exceeding the increase in the total persons engaged.

"It must be noted here that the meaning of the term "trade" as used in our census is very wide. In addition to wholesale and retail trading, it includes banking and insurance, theatres and cinemas, hotels, restaurants, bath-houses, and barbers' shops. The total number engaged in this group in 1930 was, 4,435,000, of which those engaged in wholesale and retail trade occupied 70 per cent. (3,260,000) and those in personal services 26 per cent. (1,140,000). The number of the members of households, the heads of which were engaged in "trade", was 2,094,000, which almost equalled that of the members of industrial households. Its proportion to the total population rose from 13.4 per cent. in 1920 to 17.4 per cent. in 1930. Professor Charles Gide, a veteran French economist, pointing out the enormous increase of those engaged in trade in France, once said (in his *Principes d'Économie Politique*) that if the rate of increase were to continue, all Frenchmen would become tradesmen in two centuries. A similar situation exists in Japan to-day."

of recent years they may not inconceivably be nearing in Japan a point of temporary saturation. Regarded therefore as a potential outlet for surplus population their importance would seem to be secondary to that of industry.

The only remaining channel into which further additions to the population might partially be drawn is that of emigration. In considering this as a possible outlet it should be borne in mind, however, 'that during the decade following the War more nationals of Japan have returned to their homeland than have left it',¹ that almost without exception foreign avenues are now closed, that territories under Japanese control such as Manchuria have mostly proved unsuitable for colonization, and finally that the Japanese is strongly attached to his native land and at all times reluctant to leave it. These facts seem to warrant the conclusion that a resumption of emigration even on the moderate scale witnessed before the War is unlikely in present circumstances.

If, as it would seem, industrial expansion has been forced upon Japan by the exigencies of her population problem, the particular character assumed by this industrial expansion has been determined by her position in regard to natural resources. In a country with a very limited supply of raw materials, the growth of industry is almost certain to require an extension of international trade. To a greater extent, therefore, than any of the more highly industrialized countries of the West, Japan has been obliged in building up her industries to concentrate mainly upon manufacture for export² and upon the development of foreign commerce. Since, moreover, the greatest commercial possibilities offered themselves in those branches of manufacture which depended upon a somewhat narrow range of domestic raw materials or else which consumed

¹ Institute of Pacific Relations, *Economic Handbook of the Pacific Area*, 1934.

² In an article published by *The Japan Chronicle* for Nov. 29th, 1934, Mr. Matsutaro Kimma, Director of the Chamber of Commerce and Industry, gives the export ratio for a number of important industries as follows: Cotton textiles 51.6 per cent., Rayon textiles 45 per cent., Hosiery 51.5 per cent., Pottery 93.3 per cent., Raw Silk 76.2 per cent.

materials of small weight and relatively high value obtainable from abroad without heavy transportation cost, industrialization tended to be intensive rather than extensive. Thus it has come about that silk reeling in the first category, cotton spinning and weaving, wool weaving, and rayon production in the second, together comprise by far the largest single group of industries in the country, employing one-half of all its factory workers and contributing two-thirds of the value of its exports.

So important is the bearing, both actual and potential, of the raw material factor upon Japan's economic future, that we feel justified in devoting this part of our chapter to its fuller consideration. While our survey of the subject will necessarily be brief, it should suffice to show how Japan is at present situated in regard to essential supplies and also to emphasize one or two more recent developments, which may tend to modify this situation in future.

Silk reeling is the only major Japanese industry to have its roots entirely in domestic raw material. As a producer of raw silk Japan has long since outstripped China and now accounts for by far the largest share in the world's output of this commodity. Her cotton and woollen industries, on the other hand, depend almost wholly on foreign supplies. The present production of cotton within the Japanese Empire is equivalent to about 1 per cent. of the annual consumption, while cultivation on a greatly extended scale seems scarcely feasible in the territories now under her control. As regards wool production, the potentialities of Japan proper appear to be even more restricted, for according to an estimate of Dr. Nasu made in 1926 there were then all told only about 18,000 sheep in the country. It has yet to be seen whether if the project of raising sheep in Manchukuo is realized Japan will be able to obtain part at least of her raw wool requirements from a source under her own control. In the meanwhile, she will have no choice but to continue to import her wool, as she does her raw cotton, almost entirely from countries lying outside the Japanese Empire.

Despite the fact that her greatest natural advantages lie

in the field of light manufacture, Japan has also spared no effort in building a heavy metallurgical industry, and in basing upon it numerous branches of heavy and light engineering. To quote from a paper entitled *Raw Materials in the Far East and Pacific Dependencies*, prepared by the Royal Institute of International Affairs for submission to the Institute of Pacific Relations Conference of 1933, 'She (Japan) is anxious to construct her industrial machinery at home and to supply all the varied demands of her industrial development herself.' The efforts now being made to increase Japanese self-sufficiency in this direction seem destined, however, only to emphasize her dependence elsewhere, for the future of the new engineering and machine industries, which she seeks to extend, is necessarily bound up to a large extent with the possibility of obtaining at an economic price certain basic metallurgical products such as steel, pig iron, copper, and aluminium. These materials are bulky and therefore costly to import from a distance. It follows that a new urgency is being given to Japan's raw material problem, which will compel her to exploit to the uttermost possible extent such limited mineral resources as are available within the Japanese Empire. What then, we may ask, is the actual extent of these resources as at present ascertained?

An extension of the machine industries is calculated above all to increase the consumption of steel. Steel-production on an economic scale requires, however, the presence of adequate reserves of commercially exploitable iron ore, fuel in the form of good coking coal, and either the geographical proximity of these two minerals or cheap and efficient means of transportation making it possible to bring them together.¹ In none of these respects is Japan ideally situated, and as regards iron ore her deficiencies are exceptionally marked, the highest estimate of total reserves in Japan proper being placed at 80 million tons, a figure which is roughly equivalent to a single year's production in the U.S.A. Formosa has no reserves at all, and those at

¹ Except as otherwise stated the facts and figures set forth in this section are derived from the I.P.R., *Economic Handbook of the Pacific Area*, 1934.

present assessed in Korea do not exceed 40 million tons. Manchuria possesses reserves estimated at roughly 1,220, million tons (*Manchukuo Year Book*, 1934), but the ore here is generally of too poor a quality to repay transportation (its metallic content rarely exceeding 35 per cent). To be of any economic value it must be processed on the spot and large sums have therefore been invested in the plants at Anshan and Penhsihu with the object of creating a local industry. Only 9 per cent. of Japan's average annual ore requirements are actually mined at home, the remainder being imported principally from Korea, China, and Malaya. If it were necessary to supply the iron and steel requirements of the country entirely from domestic sources it is estimated that all the Japanese ore deposits would at the present rate of consumption be exhausted in twenty-five years. In the case of pig-iron, however, about 63 per cent. of the average annual quantity consumed is smelted in Japan, while the bulk of the remainder comes in about equal proportions from British India, Kwantung, and Manchuria. Ninety per cent. of Japan's supply of pig-iron is derived from sources under Japanese jurisdiction, as against approximately 33 per cent. of her iron ore.

As regards coal of coking quality, Japan appears at first sight to be more favourably situated. The quantity imported, though tending annually to increase, is still comparatively unimportant as is shown by the following figures which relate to domestic production and consumption during the five-year period 1929-33.

Production and Consumption of Coal in Japan 1929-33

(In thousand metric tons)

<i>Year</i>	<i>Production</i>	<i>Consumption</i>
1929	34,257	35,468
1930	31,376	31,938
1931	27,987	29,139
1932	25,060	29,050
1933	30,115	34,342

Although up to the present the home demand for coal

has been met almost entirely out of domestic resources, there is every indication that the future will bring an increased dependence upon imports particularly in regard to coal of good coking quality. The total reserves in Japan proper have been estimated at about 8,000 million metric tons representing, according to calculations made by Professor Orchard,¹ a *per capita* reserve of only 118 tons, as compared with 4,070 tons *per capita* for the United Kingdom, 3,921 tons for Germany, and 27,501 for the United States.

'Even at the present very low rate of consumption, Japan's reserves will be exhausted in less than two hundred years, and at the *per capita* rate that coal is being consumed in Germany, they would be exhausted in about forty years. Not only is the supply deficient, but the coal is expensive to mine, since it lies deep and in thin seams, and very little of it will make a satisfactory coke for the blast furnace. If industrialization is to progress in Japan to anything like the degree it has in Western countries, either coal must be imported or a new source of power must be discovered.'²

Little assistance in this respect is to be looked for from the Japanese colonies, although there are limited coal deposits in Karafuto, Formosa, and Korea. Turning, however, to Manchuria, we find deposits estimated at 4,804 million metric tons (cf. *Manchukuo Year Book*, 1934) which supplied to Japan between 1926 and 1931 an annual average quantity estimated at 1,790,000 tons or 67.5 per cent. of the total coal imports into Japan during that period. Of the total coal output, about 45 per cent. comes from the great 'open-cut' mine at Fushun, where production costs have been estimated at less than one yen per ton. Competition from low cost Manchurian coal has given rise, however, to a demand on the part of domestic Japanese producers for a curtailment of imports in the interests of the local mining industry, and accordingly in 1932 sales to Japan of Manchurian coal were limited to 1,500,000 tons annually. The position as regards competitive production in Man-

¹ Orchard, *Japan's Economic Position*, 1930.

² Orchard, 'The Japanese Dilemma' (in the *Empire in the East*, I.P.R., 1934).

chukuo is discussed more fully in section 3 of this chapter (see p. 177), and it will be sufficient to indicate here the probability that, whatever restrictions be placed upon imports into Japan at the present time, the coal reserves of Manchukuo will serve in the long run as a useful adjunct to those of Japan.

In the two preliminary stages of the metallurgical process, namely ore and pig iron, Japan is, as we have seen, dependent to the extent respectively of 91 and 37 per cent. upon imports. In the final stage, however, involving the production of steel, her independence of outside sources is considerably greater. The average annual output of steel in Japan during the five-year period 1927-31 was equivalent to 80 per cent of home consumption, a balance of 20 per cent. only being accounted for by imports from abroad. In this respect a high degree of self-sufficiency has indeed been attained, but attained on a somewhat precarious basis as is very lucidly suggested by the authors of the *Economic Handbook of the Pacific Area*.

'The Japanese situation in the iron and steel industry, starting on a basis of alarmingly inadequate ore reserves, gradually becomes more secure along the metallurgical process until in certain manufactured steel products the entire demand is produced at home. This security is, in the minds of many Japanese and foreign observers, that of an inverted pyramid, the base of which—in this case control of iron reserves of adequate quality for metallurgy—must be broadened.'

Owing to her lack of natural resources, Japan has been driven to make extensive use of scrap as a substitute for pig-iron, her imports in 1932 amounting to 550,251 tons scrap and 494,575 tons pig-iron.¹ Since, however, the possibility of obtaining scrap at profitable rates is liable to be modified at any time by changes in world conditions, it would be easy to exaggerate the importance of this as an auxiliary source of raw material. If therefore despite numerous natural handicaps Japan has steadily increased her pro-

¹ In the first nine months of 1934 imports of scrap amounted to 1,270,000 tons.

duction of steel and has even on a limited scale entered the field as an exporter, the explanation lies in the unremitting efforts made by the Japanese Government to promote the steel industry, in which incidentally it has a preponderant interest through its participation in the new Japan Iron Manufacturing Company. Domestic production has been encouraged by subsidies and protective duties. It has also lately been rationalized through the medium of compulsory mergers. Pending a solution of the raw material problem, however, the intrinsic weakness of the industry remains unaltered, and all such attempts to bolster it up by artificial means can only be undertaken in the long run at the consumer's expense, an aspect which will be dealt with again in the third section of this chapter.

Ranking next in importance after iron and steel among materials entering into the machine and engineering industry are the non-ferrous metals and alloys—copper, zinc, lead, tin, and aluminium. We may therefore conclude our survey of the raw material situation, in so far as engineering industries are concerned, by considering briefly how Japan is at present situated in regard to each of the above.

Apart from coal, copper is Japan's only mineral resource of any importance. Until the Great War she was the world's second largest producer, but the development of new producing areas in Africa and South America has since had the effect of displacing her from this position. In response to an increasing industrial demand, output continued however to expand, rising in 1930 to a peak figure of 79 million tons. In 1932 total production amounted to 72 million tons, of which roughly 23 million tons were exported. Mining costs in Japan are high, and since 1931 producers have incurred severe losses as a result of the world decline in prices, but in view of the great importance of copper in all branches of electrical engineering, it is reasonable to anticipate an eventual price recovery which will once more make profitable the exploitation of Japan's reserves of the metal. The possession of these in an age increasingly wedded to the use of electricity constitutes in any case an industrial asset of major importance.

Lead and tin both occur in Japan, but in quantities insufficient to cover more than an insignificant share of the home demand. The quantities obtainable in Manchukuo are likewise negligible. In the case of zinc, domestic sources provide about half the annual quantity consumed.¹ Aluminium, on the other hand, is entirely supplied by foreign countries, since no workable deposits of bauxite have yet been discovered in Japan.

Having demonstrated the extent of Japan's dependence upon foreign sources in the case of certain essential metallurgical products, we must now consider a second factor which has an important bearing upon her industrial prospects, namely, her position in regard to motive power. Reference has been made already, albeit in another connexion, to Japan's reserves of coal-fuel, and we may therefore here confine our attention to petroleum and hydro-electric generation, the two alternative sources of power which are of importance to a modern industrial state.

Japan's consumption of petroleum products has been increasing steadily for some years. Domestic resources are extremely meagre, however, and on an average about 80 per cent. of the home demand has to be met by foreign supplies, crude and refined oil being Japan's third largest import, ranking next after raw cotton and wool. Local refineries now satisfy about 20 per cent. of the demand for gasoline, kerosine, and other refined products. Of total oil imports into Japan approximately 63 per cent. are in refined form. Neither in the Japanese colonies nor in Manchuria are important oil-fields known to exist, but at Fushun in Manchuria extensive deposits of oil shale cover the main coal seams. With a view to exploiting these, the South Manchurian Railway Company has erected a distillation plant at which the production of oil and by-products was begun in 1930. Results have so far been disappointing, for although according to estimates made by the above company some 200 million tons of petroleum are said to be

¹ According to figures given in the *Japan Year Book* for 1935, domestic output of lead, tin, and zinc was equivalent in 1932 to 10.4 per cent., 22.5 per cent., and 50.4 per cent. of demand respectively.

extractable,¹ the cost of production is at present too high for the plant to be operated economically.

The anxiety of the Japanese Government to develop sources of supply under its own effective control can readily be understood in view of the paralysis which under modern conditions would soon overtake the national defence forces if, in an emergency, foreign supplies of oil were to be cut off. Considerations of national security, outweighing all purely economic interests, are responsible for the official encouragement given to the Fushun enterprise, and in particular for the fact that the Navy Department has recently contracted to take a considerable proportion of its annual output. Similar considerations have also inspired legislation compelling foreign oil companies domiciled in Japan proper to increase their storage capacity up to a point at which they will be able to accommodate a six-months' supply, thereby rendering the danger of a sudden shortage less acute.

In explaining these precautions, a further factor to be borne in mind is that Japan has no direct and jealously guarded interests in oil concessions abroad comparable to those possessed by Britain in Iraq, Persia, and elsewhere. The risk of finding herself denied all means of access to the major producing areas is therefore a very real one. Mention should be made, however, of the concession in North Sakhalin granted to a Japanese corporation in 1925 by the Soviet Government. This in 1932 yielded some 2,300,000 U.S. barrels, a quantity equivalent to about 16 per cent. of all petroleum imports into Japan. A further concession is held in North Borneo, but this would not appear to have yet reached the producing stage.

Although by no means lavishly endowed with natural riches, Japan has yet in one respect been favoured by nature beyond the common measure. To quote Mr. Orchard:

'The same rugged topography that has limited agriculture, combined with a humid climate, has endowed Japan with excellent

¹ See paper entitled *Supply of Raw Materials in Japan*, prepared and submitted to the I.P.R. Conference 1933, by the Tokyo Institute of Political and Economic Research.

water-power resources. The streams are short and turbulent and owing to the character of the precipitation and to the numerous mountain lakes that act as storage reservoirs, their flow fluctuates little from one season to another. The small size of the islands and the proximity of the industrial centres to power sites reduces the cost of transmission, an item that has proved to be a serious obstacle to power development in other countries.¹

In her water-power Japan possesses, in fact, an asset which in certain directions does much to compensate for her deficiencies in regard to oil and coal; nor does its importance end here, for, as Mr. Orchard further suggests, it may well have a highly significant and novel function to fulfil in preserving and enlarging the scope of those small-scale domestic industries whose economic existence recent industrial developments have tended to jeopardize.

'The further development of hydro-electric energy is to be expected. It may have a determining influence upon the trend of Japanese industrialization. The ease with which it can be distributed and subdivided makes possible the decentralization of manufacturing away from the urban centre and into the small unit, a development highly desirable in Japan with a predominantly rural population attached to farm and village and somewhat slow in seeking employment in the city factory.'²

Japan ranks after the United States and Canada as the world's third largest producer of hydro-electric power.³ Power for industrial use has long been available in the chief urban centres and virtually all the large modern textile factories are equipped with electrically operated machinery. More recently the remoter country districts have been embraced within the national transmission system, so that to-day there is scarcely a village in Japan lacking the benefits of electricity. Striking evidence, moreover, of the trend towards subdivision and decentralization, alluded to

¹ Orchard, *op. cit.*, p. 50.

² *Op. cit.*, p. 50.

³ According to particulars given in the *Japan-Manchukuo Year Book* for 1935 the total capacity of all generating stations was 4,933,061 Kw. of which rather more than 60 per cent. was generated by hydro-electric power. Additional capacity giving 1,865,379 Kw. (70 per cent. hydro-electric) was stated to be under construction.

above by Mr. Orchard, is supplied by figures relating to electric motors. According to the *Japan-Manchukuo Year Book* for 1935 the number of these in use rose from 192,017 in 1922 to 565,602 in 1932. Average horse-power per unit appears on the other hand to have declined from approximately 90 h.p. to between 60 and 70 h.p., thus indicating a proportionately larger increase in the number of low and medium powered motors of the types most likely to be used by the small manufacturer.

By comparison with her present power consumption, Japan's unexploited reserve of water-power is not large. Mr. Orchard¹ estimates that her present power supply derived from both coal and water could be increased by about a third by the development of all the hydro-electric power that can be depended on continuously throughout the year. It is his opinion, however, that were all her available resources to be developed to the fullest possible extent, 'the power available *per capita* would be only a fractional part of the present power consumption in Great Britain, Germany, and the United States, and would not be sufficient to permit of any great industrial growth', a contention which appears to overlook the fact that the availability of cheap hydro-electric power has already been a contributory factor of no small consequence in determining both the character and the extent of the by no means inconsiderable growth of Japanese industry in recent years. Moreover, as Mr. Orchard himself has suggested, the unexplored possibilities of Japan's present intensive electrification are still very great, even if no further development work is attempted, for by bringing electricity into the service of the small family business it is increasing enormously the latter's range as a producer of cheap miscellaneous goods for both home consumption and export.

Elsewhere in this book a parallel is drawn between Japan and Great Britain in regard to their dependence on manufactured exports for the provision of the raw materials and foodstuffs required for sustaining or raising the national standard of life. We have dealt now with Japan's provision

¹ Orchard, *op. cit.*, p. 51.

of raw materials; it remains to consider her position in respect to supplies of food.

✓ Up to the present time Japan, with the help of her colonial territories, has been relatively self-supporting in the matter of food staples. In 1933 food, drink, and tobacco accounted for about 10 per cent. of all imports into Japan as compared with 51 per cent. in the case of Great Britain. Neither is the position in the immediate future such as to give grounds for alarm. The traditional frugality of the Japanese people combined with the fact that the chief articles of daily consumption for all classes of the population, namely rice, fish, and vegetables, are obtainable in abundance within the Japanese Empire, indicate that, even with a rising standard of living, there need not for the next few years be any very substantial increase in imports of foodstuffs from foreign countries. Indeed, the most serious problem which the Government has now to face in this field has arisen, as explained elsewhere, through the superabundance and not through the scarcity of the Japanese 'staple of life', namely rice.

We have, however, to consider whether at the present rate at which the Japanese population is increasing, pressure upon the means of subsistence will not seriously develop within the next generation; whether, in fact, the growth of a large industrial population will not presently place Japan, as it has the more highly industrialized countries of the West, in a position of far greater dependence upon foreign food imports than is at present the case.

Estimates differ rather widely both as to the extent of the annual increment which the Japanese population will receive over the next decade or so, and as to the point at which, for sociological reasons, it is likely to become stationary. The study made by Professor Uyeda¹ tends to dissipate some of the more extravagant notions entertained on this subject. Briefly summarized, Professor Uyeda's conclusions are as follows:

1. That 'the population of Japan can never reach 100,000,000, which is imagined as the possible

¹ Uyeda (Teijiro), *Future of the Japanese Population*, I.P.R., 1933.

future population, and it will stop probably at about 80,000,000'.

2. That 'as the fecundity of women diminishes the child population will stop growing'.
3. That 'the number of working population in 1950 will be larger than that of 1930 by 10,000,000'.

Assuming, on the basis of Professor Uyeda's calculations, that over the next two decades the Japanese population will increase at the average rate of approximately 600,000 per annum, we must proceed to inquire how far the productive capacity of the Japanese Empire can be extended to meet an inevitable increase in the domestic demand for rice and other essential foodstuffs. For the five-year period 1928 to 1933 the annual *per capita* consumption of rice averaged 1.080 *koku*.¹ It must be remembered, however, that this period includes several years of acute industrial and agricultural depression during which consumption was at a low ebb. In the preceding period consumption had averaged 1.13 *koku per capita*, and there seems little reason to suppose, even allowing for gradual changes of diet reducing the supreme dependence on rice, that this level will not again be approached in the near future.²

Taking 1.10 *koku* per annum, therefore, as an estimate of *per capita* consumption, and assuming that Japan's population will have increased by 1950 to a figure in the region of 78 million, the total Japanese consumption of

¹ *Japan-Manchukuo Year Book*, 1935. 1 *koku* = 4.96 English bushels.

² K. Pritzkow writing in *Der deutsche Volkswirt*, Apr. 5th, 1935, has the following observation to make: 'Owing to heavier fiscal and economic burdens upon the Japanese people, to a fall in real wages and to the consequences of rural distress, the past year has led to a fall in total rice consumption from 72,850,000 *koku* to 52,992,000 *koku* and in *per capita* consumption from 1.090 *koku* to 0.793 *koku*.' While no official figures are yet available by which to check the foregoing estimate, there is certainly a strong presumption that existing rural distress will be reflected in a much reduced rate of *per capita* consumption of all the main foodstuffs. Assuming, however, that the present condition of the peasantry is abnormal, we are probably justified in taking the higher figure as the basis of our estimate for future consumption, notwithstanding the fact that the short-term trend appears from the above to be downward.

rice in the latter year works out at roughly 85 million *koku*. Turning to Japan's actual rice budget at the present time, we see that the total supply available in 1934 was 77 million *koku* (65 million *koku* representing the crop raised in Japan proper and 12 million *koku* being imports from Korea and Formosa—for our present purpose, however, we may regard Japan and her colonies as one). Looking back over several years, the following figures show the trend of rice production and consumption:

*Japan's Rice Budget*¹
(In millions of *koku*)

	Produced in Japan	Imported from colonies	Total supply	Consumption	Consumption per capita
1927-8	62	+	11 = 73	70	1.129
1928-9	60	+	8 = 68	69	1.100
1929-30	59	+	8 = 67	68	1.076
1930-1	66	+	11 = 77	72	1.126
1931-2	55	+	11 = 66	66	1.014
1932-3	60	+	12 = 72	72	1.095
1933-4	65	+	12 = 77	73	1.090
1934-5 ²	51	+	13 = 64	71	..

It will be seen that in most of the above years the supply of rice surpassed, or at any rate equalled, the demand. Moreover, roughly 90 per cent. of this demand has been covered by home supplies. To quote Professor Nasu,³ however:

'The exploitation of arable land in Japan proper except for Hokkaido has already reached a climax leaving little room for

¹ From *Japan Year Book*, 1935.

² The figures relating to production and consumption for the period 1934-5 have been reproduced from a provisional forecast published in *The Japan Chronicle* for Nov. 22nd, 1934. Stocks brought forward from the previous year and available on Nov. 1st, 1934, are given as 16,389,000 *koku*, so that despite the small crop the balance to be carried forward after all demands have been met will be about 8,700,000 *koku*. Owing to serious distress among the peasantry, there is good reason to believe that total consumption will fall very much short of the estimate given above—see footnote 2, p. 145.

³ Nasu, *Land Utilization in Japan*, I.P.R. 1929.

further reclamation even with the very extensive and painstaking assistance of the Government.'

While comparatively little scope exists for enlargement of the planted acreage, there is, on the other hand, at least a theoretical possibility of increasing the yield per cultivated unit of area through more scientific methods of cultivation and of land distribution. The generally quoted estimate, endorsed by Professor Nasu, gives 25 per cent. as the potential future increase in the per *tan* production of rice obtainable 'through the gradual improvement of social and economic conditions as well as by constant effort to improve technical skill in farming work'.¹ The above-quoted writer estimates that an additional 631,000 *cho*² might be brought under cultivation and mentions 87 million *koku* as the maximum figure of potential productive capacity for Japan proper. To attain this latter figure, however, within the next two or three decades would call for a combination of favourable circumstances such as may very well not be realized in such a comparatively short time. It is highly probable, if not certain, therefore, that the two principal rice producing dependencies, Korea and Formosa, will be called upon to supplement to an ever increasing degree the deficiency of home production, and the question then arises: 'Can production in these areas be expanded fast enough to meet the demand that is likely to eventuate?'

Before proceeding to consider the answer to this question or to arrive at final conclusions, we must first look at the situation in regard to other foodstuffs than rice. Indispensable though rice is, the proportion of other cereals entering into the Japanese diet is on the up-grade, especially in regard to wheat, and there are grounds for expecting that any rise in the Japanese standard of living will accelerate the tendency to turn from rice to wheat consumption. At present about $1\frac{1}{2}$ million acres are under wheat in Japan, compared with 8 million acres under rice. Till 1933 the

¹ It has been pointed out by several expert writers that, to maintain the fertility of Japanese soil, fertilizers are having to be used at a rate of increase disproportionately great as compared with the resultant increase in crops.

² 1 *cho* = 10 *tan* = 2.4506 acres.

average domestic production of wheat over a number of years had been in the region of 6 million *koku* a year, though an extension in the acreage sown in 1933 was accompanied by an increase of output which raised the figure to 8 million *koku*. Average annual consumption has been 9-10 million *koku*, so that in most years Japan has had to import a net amount of about 3 million *koku* of wheat and wheat flour, of which all but a fraction comes from Australia, Canada, and the United States.

An increase in wheat consumption could therefore only take place at the expense of increased food imports from foreign countries, unless Japan herself can greatly increase her domestic wheat supplies. This she can hardly do. With her system of small holdings and manual cultivation, natural among a rice-growing population, Japan is peculiarly ill-adapted to the culture of grain crops like wheat which call for a wider acreage and mass-production methods of treatment.

The factors limiting an increased production of rice already referred to above apply also generally to wheat, except perhaps in the colder regions of Hokkaido where the population is, however, too small to permit any rapid development. Formosa does not grow wheat, Korea comparatively little (a total annual production of under 2 million *koku*), while the wheat of northern Manchuria (where the annual production is about 700,000 metric tons and the wheat acreage roughly the same as that of Japan) finds its natural outlet across the border into Russia.

A change over from rice to wheat consumption would therefore tend, it would seem, to worsen rather than improve Japan's position in regard to self-sufficiency in foodstuffs. Although rice accounts on an average for 43 per cent. of all expenditure on food,¹ there are other commodities which hold a permanent place in the national diet, chief among them being sweet potatoes, marine products, fruits, salt, sugar, and soya beans. Of the foregoing only beans and sugar require to be imported in any quantity. The former, however, can be obtained in abundance from Manchuria,

¹ See Morimoto, *Efficiency Standard of Living in Japan*, Tokyo, 1929.

leaving sugar as the only 'necessity' which must be imported principally from sources outside the Japanese Empire. The potentialities of Formosa as regards sugar-cane have yet to be fully exploited.

A marked general rise in standards of living would almost certainly result in an increased demand for the products of animal husbandry—meat, milk, butter, &c., which up to the present have figured only to a very limited extent in the dietary of the average Japanese, but become more important as the number of urban workers grows. Owing to the almost complete absence of natural facilities for grazing, this demand, if and when it materializes, will have to be met mainly by imports.

We will now revert to the central point of the problem, namely Japanese rice supplies, which we put aside in order to pursue the question of supplementary foodstuffs. We left unanswered the query whether colonial production of rice is capable of sufficiently rapid expansion to keep pace with the probable increase in Japan's consumption requirements. Taking Korea first we find that Japan now imports thence an average of 7 million *koku* a year. The Koreans themselves replace this export of rice by cheaper grains, particularly millet, grown locally or imported. So long as conditions in Korea oblige that country to part with its more valuable crop and live on a cheaper product, Japan may expect to obtain the major share of any future increase in Korean rice production. That conditions generally favour such an increase seems to be beyond reasonable doubt. To quote Professor Nasu:¹

'... the utilization of land for agricultural purposes in Korea is as yet in a much earlier stage than in Japan proper. Although there is little prospect of further expansion of farm land, the prospects for better utilization of the present arable land area are rather bright. In other words, there is room for further improvement of farm land. Further assistance may be expected from the Government for such purpose by means of a special plan laid down as described above and also from private individuals as well as corporations. . . . With all

¹ Nasu, *op. cit.*, p. 231.

these factors working together, there will be steady development in land utilization in Korea hereafter.'

He observes in a later passage:

'... the Governments of Korea and Formosa now declare that at the end of the next thirty years they expect to be able to send respectively 31,000,000 *koku* and 8,700,000 *koku* to Japan proper annually. Considering the physical conditions in Korea and Formosa, we can hardly deny the probability of reaching such figures in time.'

Taking the case of Formosa, the island now sends to Japan proper about 3 million *koku* annually. Nasu estimates that by improved methods of cultivation a further 1 million *koku* annually could be made available for export without much difficulty, and he indicates in the second of the two passages quoted above that this would by no means exhaust the potentialities of the island. Mr. Crocker, on the other hand, writing in 1930, is less optimistic concerning overseas supplies. He says of colonial rice imports:¹

'The present imports will probably continue at least for a long time: they may even increase considerably. But they can hardly increase to the figure necessary to supply Japan to the amount of the deficit which her present rate of consumption will leave her in a couple of decades hence. For the final objection to all such hopes, even assuming that the colonial crops will be greatly increased, is what of the Koreans and the Formosans themselves? While they export rice they also import millions of bushels of the cheap, coarser grains like millet. They are now too poor to retain at home the rice they grow. But as soon as their standard of living begins to rise it will take the form that it has taken in Japan—eating less coarse grain and more rice. Nor must it be forgotten that the colonial populations are also rapidly growing.'

The future position is obviously a matter of speculation, and it is hardly possible to judge to what extent Professor Nasu's expectations need to be modified on account of such arguments as Mr. Crocker brings forward.

Over the past seven years the rice crop in Japan proper is shown by the figures quoted on page 146 to have averaged approximately 60 million *koku* annually. The possibility

¹ Crocker, *The Japanese Population Problem*, 1931, p. 123.

of achieving a really substantial increase over this quantity has, as we have seen, to be considered somewhat remote. We may therefore presume that by 1950, when consumption will be in the region of 85 million *koku* per annum, the deficiency to be made up by imports, colonial or otherwise, will hardly be less than 25 million *koku*. If the official estimates quoted by Dr. Nasu for future supplies from Korea and Formosa come at all near to being correct, the two rice producing dependencies together will eventually be capable of supplementing the crop in Japan proper to the extent of about 40 million *koku* annually. Such possibilities belong to the more distant future and are at the best conjectural, but there seems no reason to expect that the remarkable expansion in colonial rice production witnessed over the past ten years will not be maintained, in which case by 1950 aggregate imports from Korea and Formosa may well be in the region of, say, 20 million *koku*.

This analysis of Japan's food situation leads to the conclusion that, while in Japan proper the nation's requirements of food will soon outstrip domestic supplies and keep growing rapidly larger till a date at least 15 years hence, yet taking the Japanese Empire as the unit of calculation (which would seem the correct method when viewing the problem from the particular angle of the study contained in this book), there is a possibility at least that the balance between production and consumption of staple foods will remain comparatively undisturbed and that Japan will be able to avoid any very substantial increase of her present food imports from foreign countries. This is on the assumption, of course, that no violent changes occur in the composition of her diet and that she does not develop a greatly increased appetite for types of food—wheat, meat products, &c.—which her empire cannot supply in adequate quantities.

Such a conclusion runs counter to what is perhaps the commonly held view, and, if correct, has an important bearing on the strength of the 'urge' impelling Japan to expand manufactured exports in order to feed herself. It implies that the compulsion to export is due to lack of

command over raw material supplies rather than to lack of food. One has to consider, however, that the mere fear of food shortage—even though that fear may prove in the end ungrounded—is for Japan a sufficiently strong incentive to seek to attain a position in international trade which will give her an option on the surplus supplies of foodstuffs existing elsewhere in the world.

§ 3. JAPAN'S INDUSTRIAL FUTURE

The future of Japan's industrial development is so greatly conditioned by the state of international economic and political relationships, that conclusions are inevitably affected by the view that is held about the kind of world that will emerge from the present chaos. Yet without some assumption of the future trend of economic policy and development in the world as a whole it is impossible to pass any judgement on the industrial prospects of Japan, depending as they do not merely on internal conditions but on the whole environment. The assumptions on which the conclusions expressed in this chapter will be based are, first that the Far East will remain at peace, and secondly that economic nationalism will lose some of its present potency, and that monetary stability and economic progress will be resumed in the world as a whole. Clearly, unless the first assumption is made, speculation about the future is useless; as regards the second the probable economic consequences for Japan of its non-fulfilment will be considered briefly. At the outset the reader must be warned of the tentative and provisional nature of these conclusions.

It must be observed at the start that the immediate future of the country is liable to be overshadowed by monetary problems. The present financial situation and the dangers inherent in it have already been described. Some observers have detected a state of disguised inflation, which may become open inflation, and it seems far from impossible that the present boom in certain manufacturing industries, which has been produced by an inflationary policy, may be checked by a financial crisis as happened in 1927. If we were taking a short view, this aspect of the

Japanese economic problem would be of great importance, but it need not occupy space in a study concerned with industrial development over a longer period. Serious as they are, the financial troubles of the country are not likely to impede for more than a short time the growth of the economic power of Japan.

We will begin then by considering the fundamental influences that have been operating during the last two or three decades, and attempt to estimate their importance for Japanese industry in the future. Two factors which will certainly retain their influence in the next ten or twenty years are, first the rapid growth of population, and secondly the shortage both of land for agricultural development and of industrial raw materials. Although the population problem and the situation regarding raw materials have already received attention in the preceding section of this chapter, it is necessary to consider them again in special relation to the attempt now to be made to follow out the lines along which industry in Japan may be expected to develop.

Japan is still passing through the stage of rapidly increasing population that has been associated everywhere with the introduction of modern industrialism. As with other countries, this phase is likely to be temporary, and already the corrected birth-rate is falling. But for the next fifteen years—and this is a fact of outstanding importance—the annual addition to numbers will probably be in the neighbourhood of 600,000,¹ and according to recent expert calculation, at least 200,000 to 250,000 persons will be added annually throughout this period to the number of Japanese for whom employment will have to be provided.² This alone must affect greatly the composition and structure of Japan's economic system. Whereas in the West the slowing-down of the rate of increase of the population is causing a relative decline in the industries

¹ Population of Japan in 1930, 64 millions; estimated population in 1950, 78 millions. See I.P.R., *Problems of the Pacific*, 1933, p. 122.

² Uyeda, *Future of the Japanese Population*, 1933, p. 10 (published by Japanese Council of the I.P.R.).

producing the necessities of life, Japan will have to move in the other direction and develop the trades producing these necessities to provide for her increasing numbers. Thus we may expect a continued expansion of the staple trades working for the home market, the more so because, owing to the very special nature of many Japanese everyday requirements (e.g. the type of cotton material required for Japanese dress), the industries producing them are, and should remain, relatively immune from the competition of cheap imported substitutes.¹

As regards, however, those of the staple industries which are concerned with the production of raw materials, these cannot be greatly extended without an expenditure of effort disproportionate to results because of the limitation of Japan's physical resources. The position in regard to future supplies of foodstuffs and raw materials was examined in the previous section, and it has been shown that, although in the case of foodstuffs Japan's territories overseas may be able to cover the growing gap between production and consumption in Japan—though this is by no means certain—she is dependent on foreign countries to supply her increased requirements of industrial raw materials: cotton and other tropical or semi-tropical products, iron ore, coking coal, timber required for fuel, paper making, artificial silk manufacture, and building, as well as the products of animal husbandry such as wool and leather. Consequently to supply her growing domestic needs she will have to increase her imports of the necessities of life. Thus we have been unable to escape the conclusion that if Japan is to increase, or even to maintain, her standard of life, she must direct a larger and larger proportion of her energies towards manufacturing industry in order to exchange her finished products on good terms for the raw materials of other lands.

Looking at things from the Japanese standpoint, this situation, provided always that restrictions on international

¹ This applies, though in a lesser degree, to rice-production, since the Japanese find foreign rice unpalatable and have a strong preference for their own.

trade are not intensified, need not be regarded with alarm. In the first place it should be observed that Japan will be coming on the market for increasing quantities of raw materials at a time when their prices, in relation to the prices of manufactured goods, will probably be low. Since the War the terms of trade between raw-material producing and manufacturing communities have moved in favour of the latter, a change caused partly by technical advances in the raw-material industries, and partly by the fact that the absorption by Western peoples of many classes of raw products has increased very slowly owing to the fall in the rate of increase of their populations. These influences will probably continue to operate, and thus at the time when Japan needs to make substantial increases in her imports of raw materials, she should be able to secure them at low prices.

But since, in order to do so at all, Japan must export, her problem will be to find markets for an increased volume of exports at prices which will not involve a deterioration of the conditions of her workers. To judge her likelihood of succeeding in this and to ascertain which types of industry she is most likely to develop is the task now before us.

We have already seen that Japan's industrial output underwent a great expansion between the time of the Great War and the beginning of the world depression in 1929.¹ It must be remembered, of course, that a given increase in the quantity of production has a very different significance in a country where population is growing fast from what it has in a country where the rate of growth is slower or where numbers are stationary, and we have to allow for the fact that in Japan the population rose from 52 millions in 1914 to 64 millions in 1930 (the date of the last census). Nevertheless, though population increased thus swiftly, it is not open to serious doubt that production increased faster than population (there is support for this conclusion in the fact that real wages advanced considerably

¹ The statistical tables in the *Japan Year Book* and in Moulton's *Japan* are convenient sources to consult for information about the increase in the output of the leading trades.

over this period,¹ an advance which was certainly not due to any tendency to capital consumption). We may, therefore, say that prior to the abnormal conditions brought about by the world crisis, Japan was in the fullest sense a developing country as regards industrial production.

The majority of industries shared in this expansion, but we are here mainly concerned with the goods that enter into international trade. It has been shown earlier that industrial growth during this period, and especially the rise of the export trade, was associated mainly with textiles, in particular, cotton goods and raw silk. Up to the world depression, indeed, the additional imports required for the growing population were obtained in exchange for a very limited range of exports sent to a few great markets. In 1928-9 three categories of goods alone, cotton goods, raw silk, and manufactured silk, made up about two-thirds of the total exports,² and no other single commodity accounted for as much as 2 per cent. of the trade. Thus between 1914 and 1929 the expansion of Japan's foreign trade was increasingly due to two staple commodities sold in a narrow range of markets—the United States, China, and India. During recent years a marked change has occurred. The recovery of exports that began in 1932 was associated with an increase in the range of goods, a rise in the importance of manufactured, as distinct from semi-manufactured products (such as raw silk), and an increased dispersion of markets. These changes have been due chiefly to the decline of the silk trade consequent on the great fall in the value of silk exports to the United States and, to a lesser extent, to the competitive success of Japanese cotton goods, artificial silk, and a large number of minor manufactures in many foreign markets, some of which (e.g. the Dutch East Indies) have for the first time become really substantial customers for Japanese goods.³

¹ See article by Dr. Ayusawa in the *International Labour Review*, Feb.-Apr. 1929; and I.L.O., *Report on Industrial Labour in Japan*, pp. 192 et seq.

² Compared with 55 per cent. in 1913.

³ In 1929 the Dutch East Indies took 4 per cent. of Japan's exports, in 1933, 8.4 per cent.

The question now arises which of these two trends—the pre-depression trend of a limited range of export manufactures sold in a small number of markets, or the present trend of greater variety of products sold over a greater area—is likely to show itself when the world finally emerges from the slump. This question is of great practical importance for Western nations, for the particular article of exports, namely silk, which was formerly one of the two great staples and has declined relatively in the last four years, is one that is not competitive with the goods of the leading manufacturing countries, whereas the articles of export which have tended to take its place are for the most part highly competitive with the West. An answer to the question involves a judgement concerning both the conditions governing the pre-depression trend in Japan and those responsible for the recent changes. The huge increase in raw silk exports before 1929 was, as already mentioned, intimately connected with American post-war ‘prosperity’, and the heavy fall in this trade since that time has been due to the intensity of the slump in the United States. Now it is recognized that the long period of booming trade in America was, in part at any rate, the product of inflationary conditions of an exceptional character, conditions that are not likely to be repeated, or, if they do recur, are unlikely to be maintained for more than a short period. It is certainly improbable that the future will see a rise in American incomes available for expenditure on luxury consumption goods as rapid as the rise which took place in the post-war decade. In view of this situation and in consideration also of the tendency of rayon to replace silk materials, Japan cannot regard the steep increase in the demand for raw silk between 1919 and 1929 as a normal growth liable to be resumed during the next ten or fifteen years, and it seems reasonable to forecast that silk exports are unlikely to recover the position that they held in Japan’s foreign trade before 1929.

Cotton exports rose less rapidly than silk exports in the pre-depression period both in quantity and value, but since then they have shown a great capacity for expansion; after

a sharp decline in 1930-1 they recovered, and the quantity exported in 1932 and 1933 was substantially greater than in 1929. The value of these exports, however, even if we make no allowance for the heavy fall in the exchange value of the yen, was still far less in 1932-3 than before the depression. It was only by offering these goods at drastically reduced prices that Japan was able to effect the recent increases in sales, and we have to ask ourselves whether the conditions which permitted her to do this are likely to continue. These low export prices have been greatly facilitated by the exceptional and temporary circumstances which have produced the Japanese industrial boom as a whole since 1932, namely the deflation of costs in 1930-1 (when Japan was on the gold standard)¹ followed by the heavy depreciation of the exchange in the subsequent inflationary period, when, owing to the continued depression abroad, she was still able to buy raw materials at low prices. This combination of advantages is growing progressively less, as has been pointed out already, and Japanese cotton exporters are having to face the difficulties of the future untempered by such assistance.

Let us look at these difficulties as they present themselves to the cotton-goods exporter. During the depression period, the total international trade in these goods was practically stationary, chiefly owing to the growth of the

¹ The substantial reductions effected in labour costs in certain exporting industries is indicated by the fact that between 1928 and 1931 average daily wages were reduced by 29 per cent. in cotton weaving. See I.L.O., *Report on Industrial Labour in Japan*, p. 203. The League of Nations *World Economic Survey*, 1933-4, chap. 5, shows that the fall in general money wages continued down to the beginning of 1934, in spite of the rise in the cost of living during the last two years, and that the reduction in average hourly rates in the textile industries between 1929 and 1933 amounted to 28 per cent. The fall in the industries producing mainly for the home market was not nearly as great (e.g. in printing and paper, metals and food) as in the exporting trades. As in all countries real wages rose in industry as a whole during the first two years of depression, owing to the fall in the cost of living. These were years in which Japanese industry was very depressed. Since then the index of real wages has fallen by about 17 per cent., and the fall in the exporting trades has been much above the average.

industry in countries hitherto the chief importers of cottons. It is unlikely that this tendency towards self-sufficiency in the manufacture of cotton goods will be reversed in the next ten years, having in view the probable growth of the industry in China, India, and elsewhere. Economic policy is fostering this tendency. Of late years import duties have been considerably increased in what were previously low-tariff countries, while fiscal protection has been strengthened in Japan's chief market since the Japan-India Agreement of January 1934. Japan may contrive to find new outlets for her cotton wares, as she has recently done in the East Indies and in Africa where she has tapped new levels of demand among customers who could not previously afford to buy imported goods, but the maintenance of these markets is likely to depend on Japan being able to continue to offer the goods at the present exceptionally low prices; moreover, in such of these markets as are under the control of European Governments she has to face import restrictions, and in some cases discrimination, against her imports. It seems questionable, therefore, whether the recent advance in the cotton export trade can be maintained for very long at its present rate. It is more likely, perhaps, that the future will see a return to the slower rate of growth which prevailed in earlier years.

Having regard to these conditions, there is considerable reason to expect that the staple trades—cotton and silk—will contribute less to the development of the Japanese export trade during the next ten years than they have in the past. What are the prospects of Japan developing in their place other classes of exports? Since 1929 a large number of minor manufactures have, as we saw in the previous section, taken a prominent place, and even during the first two years of the depression, when Japanese foreign trade slumped badly, several of these exports continued to grow.¹ This would suggest that these new lines

¹ To illustrate the present expansion of the 'miscellaneous' export trade it may be mentioned that an examination of export statistics for the first four months of 1934 show that 100 per cent. or higher increases over the corresponding period of 1933 occurred in the following articles, among

of development owe less than the staple trades to the present monetary and financial conditions. The remarkable expansion shown by the artificial silk trade has already been described. Import restrictions on Japanese cotton goods may account for some part of this growth, but it also arises from an increased demand for these fabrics on the part of Asiatic consumers. There seems no reason why Japan should not capture an increasingly large share of this new demand. Raw materials are available on the Asiatic mainland, the nature of the industry, in which organizing ability and manipulative skill are both important, should accord well with Japanese aptitudes, and cotton manufacturers are likely to transfer their activities to an increasing extent from cotton to artificial silk weaving. To a less degree an expansion may be expected in the woollen and worsted industry, particularly the hosiery branch, and here the adoption of Western dress fashions by oriental consumers—not least in Japan itself—may be expected to assist the Japanese manufacturer. The recent developments, which we have described as taking place in the field of small-scale enterprise, would point also to the continued growth of exports of cheap rubber goods, tinned fish, pottery, the simpler electrical appliances, and the wide range of other light manufactured articles which populations in process of raising themselves from primitive economic conditions and traditional standards of consumption are likely to require, but are unable, in their present stage of development, to produce economically for themselves. The success of Japan in building up a substantial trade in these commodities will depend greatly on the economic progress of other Asiatic peoples.

The metallurgical industries on the other hand—at any rate the branches concerned with primary and semi-manufactured products—offer less scope for Japanese enterprise. Here, as we have seen, the lack of ore and coking coal is a serious handicap. It does not seem that the Manchurian supplies of iron ore are likely to fill the others: rayon, coal-tar dye-stuffs, electrical appliances, woollen fabrics, linen tissues.

gap, for these are of low quality, and even if extensively exploited, are likely to be smelted on the spot. Japan has already been forced to go far afield for her ore supplies, to the Yangtze valley, to British Malaya, and to Australia. Since the whole trend in the pig-iron trade is for production to move to the ore-fields, it seems highly improbable that Japan will be able to develop a substantial production of this commodity without additional Government subsidies and heavy protection. Circumstances, therefore, are clearly unfavourable for the building up of an important export trade on a permanent basis. The steel industry also is handicapped by the high cost of fuel and by the necessity of importing much of the other materials required. The difficulties in the way of pig-iron production prevent the extensive adoption of the cheap Bessemer process of conversion and of the 'continuous method'. The bulk of Japanese steel is made from cold metal in open-hearth furnaces, and a very large proportion (over 50 per cent.) of the typical charge consists of scrap-iron. The ability to produce steel cheaply is thus bound up with the possibility of obtaining scrap at low prices. In periods of general depression and rapid obsolescence, scrap is always low in price; but when world production revives the price of scrap is likely to rise steeply, as it did in the 1928-9 boom. This would add greatly to the cost of conversion in the Japanese steel industry. As shown earlier in this chapter, during the last few years the iron and steel output has substantially risen, but the increase is attributable mainly to heavy Government expenditure on munitions and constructional work and to Manchurian development. Without the financial support of the Government aided by import duties, Japan's iron and steel industry would certainly be much smaller than it is. For these reasons Japan seems hardly likely to become a serious competitor either in crude iron and steel or in finished products of the heavier types at least, such as rails, though there is less certainty in the case of lighter articles such as tubes, bars, and hoops.

High material costs present a permanent obstacle to the growth of a trade in heavy engineering products. A

temporary barrier in this trade is also to be found in Japan's lack of highly skilled engineering labour. Japan learns quickly, but some time is likely to elapse before she can compete with the older industrial countries in this respect. Complicated engineering products, which must satisfy high standards of performance and safety, make greater demands on the skill of labour than do textiles, and countries in the earlier stages of industrial evolution are likely to lag behind in their development. This applies very much less in the field of light engineering and light metal goods, where standards of performance are less exacting, where difficulties resolve themselves into problems of organization, and where material costs form a small proportion of price. In this sphere Japan is already making headway in foreign markets, and she may reasonably expect to be able to extend her exports of these goods.

Our conclusions up to this point may then be summed up as follows. Japan is impelled by pressure of population to expand her industries and export trade. Her capacity for industrial development is undoubted, being proved by her past record. Hitherto, however, her export trade has mainly rested on two staple products and on a limited field of markets. One of these staples, the silk trade, is heavily curtailed and has poor hopes of recovery. The other, the cotton trade, has greatly expanded, but is now having to face a number of adverse influences, such as home production in some of the chief markets, and rising tariffs with other symptoms of 'economic nationalism' throughout world markets as a whole. It appears that, if Japan is to carry on her success in the cotton trade whether reckoned absolutely by the bulk and value of her exports, or relatively by the share she obtains of an international trade which may, as a whole, be dwindling, it can only be by maintaining the advantage of very low selling prices. Finally the unpromising prospects of a recovery in the silk trade and the reduction in the demand for cotton goods, due to a number of causes, point to the likelihood of Japan 'swinging-over' to the export of other classes of manufactures to a greater extent than before.

From these conclusions it follows that, in so far as competition with British exports is concerned, the field is likely to widen, and that an increasing number of industries in Great Britain are liable to feel the effects of competition with Japan. The fact was stressed in the first chapter of this book that Japanese competition owes its present effectiveness more to the character than to the volume of sales of Japanese goods and, most of all, to the factor of price. It is therefore essential to gauge how much Japan's advantage in the cheap production of goods is liable to apply to a wider range of production and how permanent it will prove. To this question we will now turn our attention. Reasons have been given for believing that the adventitious aids in the form of 'exchange bonus' and other benefits derived from the depreciation of the yen—important though they have been—have now lost a considerable part of their force. If this is so, the question we have to consider is whether normal costs of production are likely to stay at the present levels or to tend to mount to the level of costs in Great Britain and other industrial countries of the West. The principal factors which determine levels of costs have already been touched upon. Among these there is one which has attracted particular attention by the contrast revealed between conditions in East and West, namely the cost of labour. To the question of industrial labour we will now therefore revert and attempt to draw some conclusions from the facts in the previous section as to the answer to be given to the question so often asked, 'Will Japanese wages stay low or will they, under the influence of natural economic forces, tend to rise to the level of those of the Western worker?'

In the discussion of this question the social background is vitally important. Thus, when we come to consider the basis of the Japanese wage structure, it is essential to remember that rather more than half the working population of the country (actually 54·3 per cent.) still gains its livelihood in agriculture and kindred pursuits, whereas the numbers engaged in her industries are comparatively restricted (21 per cent.). Notwithstanding, therefore, the

commanding position to which these industries have attained, Japan remains primarily a peasant and agrarian state. Although a distinctive urban proletariat seems gradually to be emerging, the national standard of living is still a peasant standard and, as M. Maurette has observed in his report on labour conditions in Japan to the International Labour Office, the standard of wages in Japan bases itself upon the peasant's income. To render more intelligible, however, the interconnexion between agricultural earnings and industrial wages it is necessary that we should describe briefly the present position of the Japanese farmer and the peculiar difficulties with which he is faced, at the same time showing how both these factors react upon the industrial labour market and on the cost of living.

In Japan, industry and agriculture stand in marked contrast to one another, for whereas the former has incorporated, and here and there even improved upon, Western technique, the latter very largely retains its primitive Asiatic character with its inevitable concomitants of gross poverty, overcrowding of the land, and debt. Living even in times of comparative prosperity with scarcely any margin of income above the barest subsistence level, the Japanese farmer has scarcely any reserves upon which to fall back in the day of adversity.¹ Owing, moreover, to an overwhelming dependence upon rice and raw silk, the least economic disturbance affecting the price of these commodities easily brings him to the verge of starvation. Bearing in mind therefore the very marked decline which has actually taken place in their price since 1929 (that of raw silk having fallen in 1933 by over 60 per cent. with little prospect of recovery to anything approaching its former level, and that of rice by about 33 per cent.) it can readily be understood that the position

¹ 'Among the total 670 farm families investigated, the average monthly income per family is hardly sufficient to cover the monthly expenditure. In the calculation of the income from agriculture, the average deficit is ¥ 34·82 per month, so that the average farmer has to rely to a very large extent upon other incomes than those derived from farming for the financial needs of his household.' Nasu, *Land Utilization in Japan*, I.P.R., 1929, p. 197.

of the Japanese farmer is at present a desperate one, and that the youth among the rural population are gravitating towards the cities and the factories in the hope of finding better conditions there.

While Japanese industrial labour has always been recruited in large part from the peasantry, hitherto only a small proportion of these recruits to industry have completely severed their connexion with the land. Normally the majority would return after a year or two to their native villages and to agricultural pursuits, so that until the onset of the economic depression a certain natural ebb and flow tended to prevent any undue congestion of the labour market. From 1929 onwards, however, the deterioration in the condition of the peasants has resulted in the gradual augmentation of the number of those gravitating to the cities in search of employment without a compensatory reflux towards the villages. The floating supply of labour outran the demands of industry. In doing so it precipitated a fall in money wages which has yet to be arrested.

The extent of this fall has naturally been greatest in the textile trades, since these offer the principal opening to unskilled and semi-skilled female labour of the type which rural depression has made so amply available. For Japanese industry as a whole wages declined 16 per cent. between 1929 and 1933; in the textile trades, however, the decline approximated to 30 per cent. It might be supposed that this fall in industrial wage rates would have brought the remuneration of the workers in the factories and of the workers in the fields into closer approximation. This was not, in fact, the case, for the fall in the price of rice, which so greatly depressed the farmer, meant for the factory worker a cheapening of his diet, and, in conjunction with the reduced price of other articles of food and everyday life, of his living costs in general; so that present industrial wages are sufficient to support a standard of living actually rather better than that enjoyed by the workers in 1929, while the farmer's standard has definitely grown worse.

However disastrous this combination of circumstances may have been to the Japanese farmer, it at least greatly

favoured the exporter. The misfortune of the one has in fact proved to be the opportunity of the other, for at a time when factory mechanization is steadily reducing the amount of skill required in the performance of various industrial processes, rural depression has been the means of lowering substantially the cost of unskilled and semi-skilled labour. Similarly the fall in agrarian prices itself directly constituted to some extent a condition essential to the success of Japan's export activity, for had costs of living shown any tendency to increase an adjustment of money wages, and in consequence some loss of competitive power, could hardly have been avoided.

In view of the nexus which thus exists between farm earnings and industrial wages, it might be argued that if agricultural prices are ultimately raised as a result of Government measures, such as those now being undertaken with a view to the control and stabilization of rice production, the consequent rise in the cost of living for townsmen must sooner or later force up wages as well. The process of forcing up wages usually implies, however, determination and ability on the part of the worker to exert pressure on the employer. How does the Japanese worker stand in regard to this? In the first place, so long as he or she remains as closely linked as at present to rural life with its desperately low standard of living, revolt against conditions in the cities, which, however hard, will still tend to compare favourably with those on the farm, is less likely to develop to an effective pitch. The agricultural standard in Japan is bound, in present circumstances, to act thus as a drag upon industrial wages.

But a still more effective check on the future power of the industrial workers to effect a rise in wages lies in the probable over-abundance of labour supply for a number of years to come.

It has already been mentioned that over the next decade or so some 200,000 to 250,000 persons will be added each year to the working population of Japan, and that owing to land shortage, agriculture will be able to absorb only a very small fraction of this annual increment, so that in the absence

of an alternative outlet in the form of emigration, the majority, as they reach maturity, will tend to find their way into the industrial labour market. The next ten or fifteen years may therefore witness the emergence of a distinctive industrial proletariat, consisting of persons who must rely upon factory employment as the sole source of their livelihood; but until this growing body of workers can develop sufficient solidarity to give weight to any claim they may make for better conditions—and we have seen elsewhere that in Japan organized labour is scarcely within sight of being the social force which it has become in the West—the cost of labour, like that of any other commodity, must continue to be governed by ordinary laws of supply and demand. Assuming that the industrial labour market is likely to be kept in its present condition of over-supply, even in the event of some improvement in the situation of the peasantry, by a regular influx of labour due to the sociological factors we have referred to, we may reasonably anticipate that wages will be slow in adjusting themselves to the rise in prices, which it is the Government's object to induce.

It may, of course, be contended that the further expansion of Japanese industry must create new demands for labour and so eventually restore the relative equilibrium as between industry and agriculture which existed up to 1929. Support for this view appears at first sight to be forthcoming from the conclusions reached earlier in this chapter regarding the future of Japanese export trade, for although the opinion was expressed that the cotton industry had for the time being at least reached a point beyond which further progress would be difficult, many branches of light manufacture were judged capable of being greatly extended. Having regard, however, to the spread of mechanization as a permanent factor in industrial development, it would not be safe to assume that labour requirements will grow *pari passu* with the growth of industrial output. Technological unemployment is a phenomenon known to almost every industrial country and not least to Japan. Thus the very perfecting of technique threatens to deprive her of one of

the most hoped-for fruits of industrialization, namely an increased opportunity of livelihood for those of her population whom agriculture can no longer support.

As regards this effect of mechanization we may quote one or two significant facts. In the cotton industry the number of spindles in operation increased between 1927 and 1932 from 5,000,000 to 6,202,000. The number of operatives decreased on the other hand from 177,246 to 126,563.¹ Even more striking is a later Japanese estimate showing that between June 1929 and March 1934 the number of male workers per 10,000 spindles fell from 61.2 to 26.1, that of female workers from 218.9 to 163.7. The broad trend, however, can best be illustrated by figures derived from the League of Nations *Statistical Year Book*, 1933 to 1934, and founded, in the case of industrial production, upon estimates made by the Mitsubishi Economic Research Bureau. These show that while between 1920 and 1930 the proportion of the Japanese population engaged in industry actually declined from 19.1 to 18.4 per cent. the general index of industrial production (based on the 1921-5 average) rose between 1924 and 1930 by 39 per cent. Evidence of the continuation of this trend up to the present day is supplied moreover by the Industrial Mission of the Federation of British Industries to the Far East who refer in their report, published in December 1934, to a chart based upon calculations by the Mitsubishi Economic Research Bureau and the Bank of Japan. This shows that taking a weighted index of twenty-six articles, industrial production has increased 35 per cent. between 1930 and 1934, whereas the employment figure has increased by only 5 per cent.² It might reasonably be concluded therefore that the great expansion of manufacturing activity which has taken place in Japan since the War has

¹ *Japan Year Book*, 1934.

² A point which must not, of course, be overlooked, is that the replacement of manual labour by machinery has the effect of lessening the importance to the manufacturer of his wages bill and proportionately the rise or fall in wage-rates also loses significance in connexion with the assessment of costs of production.

brought with it relatively little benefit in the shape of additional opportunities for employment. We may presume that, while fresh demands for labour will certainly arise, more especially as a result of the establishment of new industries, the reduction of Japan's present labour surplus to normal proportions would call for a far greater expansion both of commerce and of industry than appears possible, at any rate in the nearer future. According, therefore, to all present indications, the Japanese manufacturer may justifiably look for the continuance of conditions in which he will enjoy the benefit of low money wages.

It has been repeatedly emphasized in earlier parts of this book that in looking for the causes of the lowness of Japanese manufacturing costs, at least as much attention must be paid to efficiency as to the wage-level. In continuing our inquiry into the chances of manufacturing costs remaining abnormally low judged by Western standards, we must therefore examine the outlook in this regard. Japan has proved her ability to manufacture and sell at low prices a wide variety of articles, but despite the progress made in recent years, many of her manufactured products are still of poor quality. The fact that many Japanese cotton spinners are turning their attention to spinning finer counts of yarn than heretofore is, therefore, not without its significance for the future as suggesting that in numerous branches of manufacture technical resources will henceforth be directed more towards securing qualitative improvements than to fresh savings in production costs. In all such efforts to better the reputation of Japanese goods the Government is actively interested, as was shown as long ago as 1924 by the establishment of Government inspection stations in connexion with the raw silk trade. The Export Guilds law of 1925 had in some degree a similar object, but a more general realization of the importance of raising quality, if Japan is to consolidate her position in world markets, is only now beginning to dawn. Under official leadership, however, efforts are being made to remedy defects in economic organization wherever possible, some of which will almost certainly lead to success.

In several directions there is likelihood of a further improvement in efficiency which, irrespective of the future trend of wages or of attempts to raise quality, must enhance competitive power by reducing costs of production. In the cotton textile industry, it is true, efficiency and organization have already reached a level where scope for improvement except in the direction of quality must necessarily be limited. Were wages to increase, the countervailing effects of an increase in efficiency could, therefore, in all probability not be counted on to prevent a rise in production costs as far as this particular industry is concerned.

Observation of Japanese internal conditions has led us to conclude that such an increase in wages will not soon take place. The supply of labour seeking employment must almost inevitably continue to outrun demand, thereby acting as a drag upon wages, while the economic and social link between farmers and factory workers tends to limit the margin of difference between their respective earnings. An increase in workers' cost of living might, it is true, arrest the present downward trend of industrial wages, or at least keep them from falling further. A movement in this direction depends primarily upon the extent to which the Government may be prepared to raise the prices of food artificially in order to improve the condition of the peasants. It would appear, therefore, that an effective policy of agrarian relief must run counter to the interests of Japanese manufacturers concerned with the export trade, while on the other hand a continuance of present agrarian conditions threatens to spell disaster for the mass of Japan's rural population.

The discussion of wage-levels has thus led us to the wider field of social and political forces. It is impossible to consider economic trends in isolation from these, and we must now proceed to trace, in a few specific cases, their influence on industry.

In some respects the immaturity of industrialism in Japan and the relatively primitive character of her social system constitute an obstacle to successful competition with other nations, as in the case of the shortage of capital

and of highly skilled labour of certain types. In other respects immaturity is a potential advantage. The position in Japan regarding industrial relations is an example of this. Relations between labour and capital have been shown to be different in kind from that of the West, being affected by a feudal ideology carried over from an earlier era. The weakness of trade unions and paternalism in industry are other survivals. From a purely social point of view there may be strong objections to certain features of Japanese industrial relations. It seems, on the other hand, probable that they endow the Japanese industrial system with a greater power of adjusting itself to changing circumstances than is possessed by the more highly developed industrial systems of Western democracies where social and political resistance to the changes required by economic conditions is often very strong. Doubtless in course of time this resilience in Japan will diminish, but for some years to come it is likely to persist. Again, the necessity of providing a greatly increased quantity of capital goods for her growing population will involve national saving on a large scale which will act as a tendency to reduce the proportion of the national income going to wage-earners.

The rapid growth of population is another social force which, while creating the serious problems already referred to, is of advantage in other directions by helping to maintain elasticity in the economic system. In a country with a rapidly increasing population the demand for nearly all classes of commodities, particularly the basic necessities, is likely to expand. Consequently, in so far as concerns the trades producing for the home market, Japan is not likely to be troubled to the same extent as Western countries by the serious problems of labour transference and capital depreciation associated with a situation in which the older staple industries are stationary or declining. The difficulties attaching to transference will, in any case, be mitigated in Japan by the fact that the additional numbers coming on the labour market each year will constitute a relatively high proportion of the total working force, for changes in the relative size of the different industries in

response to alternations in demand can, in such circumstances, be effected quickly and without giving rise to a dangerous unemployment problem, merely by shifting the direction of industrial recruitment. Thus the problems of adjustment are not likely to be so acute in Japan during the next twenty years as they are in the West, and the response of her industrial system to changing circumstances both at home and abroad will probably be much greater.

Against this there are things in the social and political situation which tend to retard industrial progress. It has already been indicated, for instance, that industrial development will be adversely affected if the Japanese retain their peculiar tastes and requirements, particularly in regard to the consumption of rice. Another, and probably more important, drag on industrial advance is liable to occur on account of the resistance offered by vested interests to the adoption of an all-round industrial policy which would threaten their particular sphere. It is clear that if Japan is to expand her foreign trade, she must do so by specializing in those activities in which her relative advantages are greatest. This policy is bound to be hindered if measures are taken for extending or maintaining production in other categories of trade. For example, cheap fuel is, in spite of Japan's vast resources of water-power, an essential condition of her industrial expansion. Yet in the interests of local mines producing at high cost, the price of coal in Japan has been kept up not only by tariffs but also by agreements between the Japanese coal-owners and the South Manchurian Railway designed to limit the import of cheap coal. Many other industries have been bolstered up by protective duties and subsidies, and producers who have suffered severely from foreign competition, such as the agriculturists, have pressed strongly for an extension of this assistance. In a country in which political power is largely exercised through groups, the claims of threatened interests will prove difficult to deny. Resistance is already being offered to competitive imports coming from the Japanese colonies as well as from foreign countries. There is, further, a conflict between political and economic objec-

tives which is likely to hinder the natural course of adjustment. We have seen that although, owing to lack of local supplies of ore and coking coal, Japan has little chance of creating an efficient iron and steel or heavy engineering trade, she may well become an important centre for the manufacture of the lighter and simpler metal goods. Clearly this latter development will be checked if the price of imported crude iron and steel is raised by means of tariffs imposed in the interests of the heavier branches of the industry. Yet this is liable to occur because for military reasons Japan will be under a strong inducement to preserve her heavy plants at whatever cost to her economic interests.

This conflict of economic and political motives shows itself in an extreme form over the problem of the livelihood of the peasantry, to which we must now for a moment revert. It is generally agreed that the Japanese peasant's standard of life rose less than that of the urban workers between 1914 and 1929 and has fallen more steeply since 1929.¹ In some degree the present rural over-population may be traced back to the characteristic immobility of workers in agriculture. But other contributory influences have operated in the past, such as the rise in the present century in the demand for rice and raw silk, the import duties on agricultural products, and the practice of the Government of providing huge sums for valorization schemes in times of depression when the market prices of raw products have fallen very low. This type of official help has certainly impeded the transference of peasants to occupations in which they could contribute far more to the national income. If, as seems likely, the demand for raw silk fails to recover, the peasants' position will deteriorate, and still further Government assistance will be required to maintain them on the land. Obviously the burden of preserving the peasantry in this fashion will fall on the urban workers and industrial capitalists, and will, as pointed out already, have the effect of raising manufactur-

¹ I.L.O., *Report on Industrial Labour in Japan*, p. 7 and note, and Crocker, *The Japanese Population Problem*, Chap. V.

ing costs to the detriment of the export trade in finished products.

The purely economic interests of the country would seem, therefore, to require a reduction in the strength of the peasantry. But here again economic interests and social and political considerations come into conflict. The army, drawn largely from among the farming classes, has interests in common with them and, for so long as the former retains power in Japanese politics, the military element may be expected to favour policies of peasant protection, partly because of a natural anxiety to maintain a large home production of foodstuffs, and partly because any weakening of the peasantry would react on the army's strength. In this connexion it is not without significance that the political groups formed recently among the young officers should have professed themselves bitterly hostile to financiers and industrial capitalists. There exists, meanwhile, still another political motive for 'underpinning' the peasantry. The peasants represent in a sense the repository of the traditions of Old Japan, and offer a powerful resistance to the disintegrating influence that comes from urban and industrial life. The preservation of paternal and semi-feudal relations in industry which is characteristic of Japan has probably been possible only because so many of the urban workers have been drawn from rural families and retain vestiges of their peasant ideology. If the peasantry is weakened, Japan's social and political life must be profoundly modified and the country might conceivably be shaken to its foundations by the changes that would ensue.

The Japanese governing classes are thus faced with a dilemma. If they follow the policy that economic considerations appear to dictate, then they must be prepared to withdraw financial support, not only from certain great manufacturing interests of a 'non-economic' nature, but from the peasantry also. This would result in a further depression of the rural classes pending the time when the operation of natural laws may re-establish an equilibrium between them and the other classes. Such a policy would provoke political resistance on the part of those affected and might

even undermine the basis of the Japanese State as at present constituted and of the old Japanese culture. If, on the other hand, the Government pursues from general political motives a policy of financial support for the peasants, the consequence will be to impede the expansion of the exporting trades and to place additional burdens on the urban workers, provoking unrest among them. There appears to exist, then, an inherent contradiction in the situation which does not admit of any obvious solution short of a trial of strength. The resilience in Japan's economic system together with the genius for successful compromise possessed by the governing classes, and indeed by the whole people, may, indeed, postpone the issue and prevent the struggle from taking a violent form. But in the meantime the very existence of this conflict of interests and opposition of forces is likely to prove a brake on industrial expansion and competitive export power.

The reactions of national policy on industrial development are even more clearly apparent in what may be called Japan's 'imperial problems'. Let us consider the part that the Japanese overseas empire and Manchuria are likely to play in the economic development of the home country. The importance to Japan of Formosa, Korea, and Manchuria will depend on the extent to which they afford markets for manufactures, fields for profitable investment, and sources of cheap raw materials. If, through Japanese enterprise, the empire is developed so as to provide the home manufacturers with cheap raw materials and if, as a consequence of this, a reciprocal export of Japanese finished goods grows, then the empire may be of great value in assisting in the industrialization of Japan. Political control can certainly be turned to the benefit of Japanese industries since foreign imports to the colonies can be subjected to import duties and important customers such as the colonial Governments, and, in the case of Manchuria, the South Manchuria Railway, can give preference to Japanese goods in placing their orders. But if, in the pursuance of political objectives, the Japanese Government takes deliberate steps to put a ring round the empire and

to make it self-sufficing, this cannot but lead to a misdirection of investment and a less economical distribution and utilization of Japanese resources and so prove economically injurious. This policy of an 'economic bloc' is, as a matter of fact, the course advocated by some writers and politicians.¹ In support of their arguments, the advocates can point to the large increase that has taken place since the War in the proportion of empire to total trade, and to the recent marked expansion of trade with Manchuria. But actually that proportion is even now only one-quarter,² and there is no probability that the colonies will ever be able to supply their mother-country with such essential raw materials as cotton, iron ore, and wool as cheaply as she can buy them from abroad, or that the colonial markets will prove adequate substitutes for India, China, and the United States. To some extent the Japanese Government has embarked already on this 'uneconomic' policy, the growth that has taken place in the relative importance of Japan's empire markets being due in part to differential tariffs and other such politico-economic devices. For example, the growth of the Formosan sugar industry has been fostered by subsidies, special credit facilities, and import duties on foreign sugar, the result of which has been to raise the cost of the commodity to the Japanese consumer. Again, some of the increase in Japan's exports to her colonies, including the recent expansion of trade with Manchuria, has been caused by heavy Japanese investment and governmental expenditure in those areas, often undertaken for political rather than economic reasons. It is not suggested that the policy is nationally unwise—

¹ Seiichi Kojima, 'Japan-Manchukuo Economic Bloc' (in *Contemporary Japan*, Dec. 1932).

² The proportion of Japan's trade with her colonies to her total *overseas* trade rose from 13 per cent. in 1920 to 21 per cent. in 1928 and to 27 per cent. in 1933. The colonies include Korea, Formosa, Karafuto, and Nanyo. The trade of Japan proper with areas not part of the Empire but under Japanese control, namely Kwantung and Manchuria, amounted to 9.6 per cent. of her total *foreign* trade in 1932 and to 12.5 per cent. in 1933. Sources: *Financial and Economic Annual of Japan*; I.P.R., *Economic Handbook of the Pacific Area*.

economic ends may sometimes be rightly subordinated to political ends—but it must be recognized that deliberate measures to divert the natural course of trade prevent the most economical distribution of resources, and that this is an important consideration in a country in which the standard of life is still low.

Another conflict of policy disturbing to industrial evolution arises in connexion with the economic relations between Japan herself and her overseas dependencies, namely whether home or colonial interests are to predominate in cases where competition arises between the two. There are many lines of production in which colonial exports may, or do, compete successfully with Japanese products in the home market. The home interests then on occasion appeal for protection to the State. Already imports of Manchurian pig-iron and coal have been restricted in the interest of Japanese producers and the Japanese peasants are asking for protection against Korean rice. Conversely, it is feared by some that Japanese cotton exports to Manchuria may be threatened by the rise of a local cotton industry.¹ Thus, in both home and colonial affairs, we find the Japanese Government placed at the cross-roads and obliged, in choosing the course to take, to do their best to reconcile broad national policy with the dictates of sound economy as well as with pressure exerted by opposing sectional interests.

The weight that will be given in the formation of policy to conflicting aims and interests is bound to depend to no inconsiderable degree on the kind of international environment in which Japan will find herself placed. If in the next few years the trend towards economic nationalism is reversed in the world as a whole and if progress is resumed, then the advantages of forming part of an international economic system will become more pronounced, and the defects of a policy designed to secure a high degree of self-sufficiency within the boundaries of the empire will become more obvious. But if economic nationalism is intensified and political relationships exacerbated, Japan will have less

¹ I.P.R., *Problems of the Pacific*, 1933, pp. 432-3.

incentive to let slide industries regarded as necessary to her security and a greater incentive to pursue a policy of imperial expansion, the probable result of which would be to check the growth of her national wealth and to create disturbing conditions throughout her economy as a whole. In the former of these two cases the potentialities of industrial development which we have examined in this section would have greater chances of fulfilment, and Japan might well be expected to increase her share, quantitatively and qualitatively, of world trade in manufactured goods. In the latter case her powers of industrial expansion would be circumscribed and distorted and her place in world trade would tend to diminish. The diplomatic consequences of either eventuality are obviously a matter for the closest consideration, but lie outside the scope of the present study.

Japan's Balance of International Payments¹

This table is based on the form required by the League of Nations and includes the figures for the foreign trade of Chōsen and Taiwan

<i>Inward or Credit Movements (Exports)</i>	1932	1931
I. MERCHANDISE:	Million yen	Million yen
1. Merchandise, including silver bullion and coins other than gold, exported (according to trade returns)	1,491.7	1,198.7
2. Adjustment of 1 in order to arrive at the commercial value f.o.b. . . . .	..	..
3. Contraband exports . . . . .	..	..
Total	1,491.7	1,198.7
II. INTEREST AND DIVIDENDS.		
4. Interest received on inter-governmental debts n.e.i. (inter-allied debts, &c.) . . . . .	..	..
5. Interest received on other foreign Government and municipal loans	9.9	9.9
6. Yield of other long-term capital investments abroad:		
(a) Interest	3.6	} 62.4
(b) Dividends, profits, &c.	68.6	
7. Interest received from short-term capital invested abroad	5.1	3.9
Total	87.2	76.2
III. OTHER SERVICES:		
8. Income of national ships on account of all foreign traffic *:		
(a) Ordinary freights	154.5	140.2
(b) Charter money	1.6	2.2
(c) Passage money	12.7	13.9
9. Port receipts from foreign shipping in national ports	5.0	3.9
10. Transport and other charges received for foreign goods transhipped or in transit (if not included in group I) . . . . .	..	..
11. Commissions, insurance, brokerage and similar receipts, n.e.i.	117.3	108.8
12. Post and telegraph and telephone earnings, n.e.i.	1.2	1.5
13. Funds brought in by immigrants and returned emigrants	} 98.4	42.7
14. Emigrants' remittances and money gifts from abroad, n.e.i.		
15. Receipts from foreign tourists and travellers	39.9	27.7
16. Diplomatic, consular, and similar expenditure in Japan	6.6	4.5
17. Receipts for services rendered in Japan for 'persons' domiciled abroad, n.e.i. . . . .	..	..
18. Government receipts in cash on account of reparation payments:		
(a) Amortization	} ..	2.0
(b) Interest		
19. Counter-value of reparation receipts in kind, included in merchandise imports below . . . . .	..	1.2
20. Government receipts from abroad, n.e.i.	3.7	2.9
21. Other current items	23.6	1.0
Total	464.5	352.5
IV. GOLD COIN AND BULLION:		
22. Gold bullion and gold specie exported (according to trade returns)	112.7	419.9
23. Adjustment of 22 in order to arrive at the commercial value f.o.b. . . . .	..	..
Total	112.7	419.9
Grand Total	2,156.1	2,047.3

NOTE:

(1) ¹ Reprinted from the *34th Economic and Financial Annual of Japan, 1934* (Tokyo: Government Printing Office). "n.e.i." means "not elsewhere indicated".

(2) * Foreign shipping traffic here means all traffic other than that between domestic ports. Maritime freight on imported goods, which is included in group I of imports, is unknown.

Japan's Balance of International Payments (continued)

<i>Outward or Debit Movements (Imports)</i>		1932	1931
		Million yen	Million yen
I. MERCHANDISE:			
24. Merchandise, including silver bullion and coins other than gold, imported (according to trade returns)		1,548.5	1,340.8
25. Adjustment of 24 in order to arrive at the commercial value c.i.f. . . . .		..	..
26. Contraband imports . . . . .		..	..
Total		1,548.5	1,340.8
II. INTEREST AND DIVIDENDS:			
27. Interest paid on inter-governmental debts n.e.i. (inter-allied debts, &c.) . . . . .		..	..
28. Interest paid on other Government and municipal foreign debt		58.0	55.0
29. Yield of other foreign long-term capital invested in Japan:			
(a) Interest		39.7	38.1
(b) Dividends, profits, &c.		20.8	
30. Interest paid on foreign short-term capital invested in Japan		6.5	6.7
Total		125.0	99.8
III. OTHER SERVICES:			
31. Payments to foreign ships on account of traffic between domestic ports:			
(a) Ordinary freights . . . . .		..	0.6
(b) Charter money		1.7	..
(c) Passage money . . . . .		..	..
32. Port expenses incurred by national shipping in foreign ports		49.3	40.5
33. Transport payments to foreign carriers, n.e.i. . . . .		..	..
34. Commission, insurance, brokerage, and similar payments, n.e.i.		108.4	105.9
35. Post, telegraph, and telephone payments, n.e.i.		5.3	4.6
36. Funds taken out by emigrants and returning immigrants . . . . .		..	..
37. Immigrants' remittances and money gifts sent abroad, n.e.i.		3.9	3.0
38. Expenditure abroad by national tourists and travellers		29.6	34.4
39. Diplomatic, consular, and similar expenditure abroad		9.6	9.9
40. Payments for services rendered abroad for 'persons' domiciled in Japan, n.e.i. . . . .		..	..
41. Government payments in cash on account of reparations:			
(a) Amortization . . . . .		..	..
(b) Interest . . . . .		..	..
42. Counter-value of reparation deliveries in kind, included in merchandise exports above . . . . .		..	..
43. Government expenditure abroad, n.e.i.		83.9	33.3
44. Other current items		21.8	12.1
Total		313.5	244.3
IV. GOLD COIN AND BULLION:			
45. Gold bullion and gold specie imported (according to trade returns)		0.7	31.7
46. Adjustment of 45 in order to arrive at the commercial value c.i.f. . . . .		..	..
Total		0.7	31.7
Grand Total		1,987.7	1,716.6
Surplus (+) or deficit (-) on account of:			
(a) Goods and Services (I-III)		(+) 56.4	(-) 57.5
(b) Gold (IV)		(+) 112.0	(+) 388.2
(c) Goods, Services, and Gold (I-IV)		(+) 168.4	(+) 330.7

CHAPTER III

CHINA

§ 1. BRIEF HISTORY OF CHINESE INDUSTRIALIZATION

MODERN industry was established in China nearly a quarter of a century later than in Japan, and, as previously stated, under very different auspices. The systemization and planning which we have seen to have characterized the rise of industry in Japan in close relation to the internal policy of the country had no parallel in China, where State direction of economic activities hardly existed at all, and where the process of modernization was to a great extent determined by the extraterritorial rights and privileges of foreigners, which included foreign control of the principal ports.

Compared with Japan, therefore, Chinese industrialization has been fortuitous and haphazard. Its beginnings and subsequent development were closely linked up with the foreign trade of the country, and it will be well to preface its history with a short sketch of China's trade development over the period of modern contact with the industrial West.

Until well on into the nineteenth century China was virtually self-sufficing in manufacture. There was a large manufacture of silk (the prerogative of China since classical times), and a considerable production of artistic and 'luxury' goods for the Court and the wealthy classes; there were fairly large-scale potteries and small workshop industries for wood and metal-ware. Apart from these there was little organized industry, the peasant masses supplying the bulk of their common wants, including clothing, by the work of their own hands in the intervals of agricultural labour. The isolationist tradition which had existed since the time of the Ming Dynasty restricted traffic with other countries, there being only a small exchange of goods, in which the export of silk and import of furs from northern

Asia and of marine products from Japan ranked as the most important.

Chinese indifference to goods from the outside world was counterbalanced by an increasing appetite on the part of the West for Chinese products and by the enterprise of the Chartered Companies when they started to trade with the Far East. This stimulated the Chinese export trade in silk, tea, cotton cloth, and chinaware, which had to be paid for mainly with silver bullion, the only commodity at that time acceptable to the Chinese on any considerable scale. The exported cotton cloth consisted of the material known in England as 'nankeen'—derived from the name of the present capital of China—which was finer than the output of the weaving looms of the West, and was in great demand in England for the dress of the period. China was thus, at this period of history, supplying England with the particular article in the shape of cotton cloth, which later became the staple British export to China.

The discovery of opium as an acceptable alternative to silver in exchange for Chinese exports brought about in the middle of the nineteenth century a reversal of the trend of trade, which now became 'unfavourable' to China. The position veered again later, but finally settled down to a normal 'adverse' condition, in which it has remained for the last half century, and which has lately become intensified to a disquieting extent.

When the nineteenth century entered its last quarter China's external trade was still limited to a small category of products, consisting chiefly of imports of cotton goods and opium and exports of tea and silk. The unimportance to China of her foreign trade at that stage is emphasized in the recent Decennial Report (1922-31) of the Chinese Maritime Customs, whose author writes:

'In the enormous cloth requirements of the country, foreign importation contributed as it were but one drop to the bucket. Foreign cloth was wanted only for special, not ordinary purposes; had the entire foreign trade of China suddenly ceased in the year 1877, the economic life of the country would have been affected but little.'

It may be said, in fact, that industrial competition from the

West had, up to this time at least, hardly made itself felt in Chinese homes and workshops. On the other hand, from the Western point of view the China trade was becoming increasingly important as an outlet for factory production, and although at this stage it was the cotton industry which was chiefly concerned, a widening range of demand soon began to develop, and China became an importer of a number of simple 'necessities' such as matches, soap, glass, aniline dyes, and tin plates. About this time kerosene too, as a substitute for native vegetable oils for use in lamps, obtained the footing in China from which it has grown to the point of becoming the fifth, in value, among Chinese imports.

Cotton goods, however, became and remained the prime staple of trade, holding the first place in imports from 1885 onwards. At first the principal trade was in cotton 'manufactures' (that is to say, cloth in its various forms, chiefly plain 'shirtings' and 'sheetings'). The import of yarn for the use of the Chinese hand looms was a rather later development, and was closely associated with the growth of power-spinning in India and Japan. India, which had developed her spinning mills much earlier than Japan,¹ was China's supplier at first but was soon caught up by Japan. While the former subsisted on her own production of raw cotton, Japan had to depend on imported supplies. These came from China, so that a situation arose in which Japan took Chinese raw cotton and returned it to China as yarn, thus doing for the Chinese with the help of factory plant what they had previously done for themselves by hand. This was a factor in China's own industrialization. As Dr. Remer suggests,² it 'hastened the decline of spinning in China, and helped to prepare the way for the introduction of power-driven spindles into China'. Great Britain, it may be added, early found herself excluded by Indian and Japanese competition from the Chinese market for all but the finer counts of yarn.

¹ The one million spindle mark in power factories was reached by India in 1876, by Japan in 1898, and by China herself in 1912.

² *The Foreign Trade of China*, by C. F. Remer, p. 94.

We are thus brought to the time when factory industry in China made its first essays in the field of cotton spinning. It will be convenient, however, before dealing specifically with Chinese factory development, to carry to its conclusion our brief survey of her foreign trade.

China's expanding demand for imported goods was balanced by the discovery on the part of the Western nations of large-scale uses for various Chinese natural products. There developed a very important trade in oil-bearing beans and seeds; animal products—hides, skins, wool, and eggs—came to command an increasing market, and as time went on a trade grew up in several of the less common industrial ores such as tungsten and manganese. Soon after the turn of the century China's foreign trade was very substantially expanded by the rapid extension of railways, the construction within a few years of some 7,000 miles opening up immense new areas to trade. Railway building, and subsequently factory erection, created in their turn a demand for imported engineering products, which has still more recently extended to electrical plant for industrial and municipal installations.

To go back to the early years of the century, Japan's successful war against Russia launched the former country on its rapid industrial career, and greatly increased the Japanese share in the China trade; her exports of cotton goods in particular advanced by leaps and bounds. The Great War had a very similar effect. Japan for a time captured the Chinese market, her exports of cotton piece-goods of the commoner varieties eclipsing temporarily those of Great Britain. China, however, had by now firmly embarked on her own industrial career, and began to win back for herself the manufacture of her own needs of cotton yarn. Cotton mills multiplied in China, while at the same time the cultivation of the cotton plant steadily spread and increased. The machinery required for these mills was imported chiefly from England, who thus found herself supplying one of her best cotton-goods customers with the equipment needed for the killing of her own trade.

The period from the end of the War to the present time

witnessed further important changes in the trend and character of Chinese foreign trade. Up to 1929 both imports and exports rose steadily, but from that date onwards the export trade has declined with alarming rapidity, while imports followed in their wake from 1931 onwards. On the export side silk, which had formerly been the main staple of the trade, suffered particularly from increased Japanese competition coupled with the lack of demand for luxury products, and after 1928 lost its position at the head of the list, its place being taken by beans and bean products.¹ Raw cotton meanwhile rose to the third place, and constituted, in 1933, $6\frac{1}{2}$ per cent. of the total of Chinese exports.

Similarly the mainstay of imports, namely cotton piece-goods, fell from the first place to, eventually, the sixth. Cotton yarn experienced an even greater collapse. From holding at the beginning of the period with which we are dealing the second place among imports, its importation diminished by 1933 almost to the point of extinction. In place of cotton goods generally, China became an importer primarily of foodstuffs and raw cotton, the percentage of total imports represented by rice, wheat, and sugar in 1933 being over 20 per cent. and that of raw cotton $7\frac{1}{4}$ per cent.² Apart from these changes there came about a considerable diversification of imports which now began to include among the important items chemical fertilizers, motor vehicles, and electrical machinery; woollen goods too, which all through the previous century had striven in vain to establish a market in China, became an important import.

The falling off of China's exports, combined with her greatly increased requirements of imported foodstuffs, led during the recent years of depression to a serious aggravation of her unfavourable balance of trade. Money remit-

¹ The position was again reversed, however, after the separation of Manchuria, the chief purveyor of soya beans.

² The explanation of China's two-way trade in raw cotton is, of course, that she exports the shorter staple and imports the longer staple variety, a combination of the two being generally required by modern spinning mills.

tances from the large and wealthy colonies of Chinese overseas tended at the same time to decrease on account of the depression and of the rising price of silver. The resulting adverse position in international payments was temporarily met by China changing over from the position of an importer to that of an exporter of silver bullion, till in October 1934 the Chinese Government, under the influence of the price-raising policy of the United States Government, placed an embargo on silver exports in an attempt to 'hold' the exchange rate. The situation obviously demands a policy of increasing exports to redress the disturbed balance of payments, and this, it may be observed, should prove a stimulus to the export industry of China.

It has been thought desirable to prelude the history of Chinese factory development by this sketch of the foreign trade, because of their inter-relationship. This is due partly to the large role which foreign enterprise has played in the industrialization of the country, and partly to the fact that when factories started in China the great majority of them were for the manufacture of cotton products which formed the chief article of import for the China market. As this market is, or till recent years was, a substantial element in world markets, its loss is in itself, and apart from the question of Chinese competitive exports, a matter of serious moment to the manufacturing countries of the West. It is now time, however, to turn our attention from trade to the rise and development of modern industry in China.

Factory development may be said to have taken its start from the Treaty of Shimonoseki which concluded the Sino-Japanese War in 1895. By the terms of the treaty Japanese nationals obtained the right to engage in manufactures in treaty ports and 'open' cities, and to import machinery for the purpose, with the stipulation that goods manufactured in China should be on equal footing with imported goods in regard to internal charges and privileges. Under most-favoured-nation clauses, these rights automatically accrued to the other 'treaty' Powers.

The Chinese, prior to this, had established no more than two or three power factories, the first being a cotton mill built in 1890 by the enterprise of the famous Li Hung-chang. The earliest foreign-owned mills to be set up in China under the privileges accorded by the new treaty were established at Shanghai by British, Germans, and Americans. Within a short time native-owned factories began to make an appearance, sporadically at first, but soon in increasing numbers.

In the ten years subsequent to the treaty, factory development made small progress and at the end of the period there were still only seventeen mills in China, of which four were foreign-owned. From this point onwards there was a slow but steady growth, chiefly in the form of cotton mills, but including also flour and oil mills, and soap, candle, glass, paper, match, and cigarette factories.

The Great War, by checking foreign, other than Japanese, exports to China, provided a boom period for Chinese factories which established Shanghai and, to a lesser extent, Tientsin and one or two other ports, as important industrial centres. Between 1915 and 1920 the number of cotton mills doubled, the spindleage increased by nearly 50 per cent., and looms more than doubled in quantity. There followed a post-war slump, as in other countries, which weeded out many of the smaller factories, especially Chinese-owned, which had sprung up under the influence of the boom. This increased considerably the ratio of foreign-owned mills, or rather of Japanese, since the British-owned remained constant in number, their proportion of the whole declining from 20 per cent. in 1915 to about 5 per cent. ten years later.

From 1925 onwards the expansion of the cotton industry in China, measured by the number of mills and quantity of equipment, has advanced steadily but at a much slower rate, while other less important industries, most of which are of considerably later origin than the cotton mills, show a more rapid rate of development. A general bird's-eye view of industrial development from the early days of the cotton mills up to 1930 can be obtained by a perusal of

the following data supplied in Professor Tawney's *Land and Labour in China*:

	1898	1900	1910	1913	1920	1925	1926	1927	1928	1929	1930
Cotton mills	12	17	26	28	54	118	118	119	120	..	127
Cotton spindles (in thousands)	417	565	831	1,210	1,650	3,569	3,414	3,612	3,613	..	4,223
Cotton looms (in hundreds)	21	..	31	..	95	216	259	298	298	..	293
Flour mills	..	3	31	57	141	176	..	..	193	193	..
Factories of all sorts in Shang- hai employing over 30 workers	..	..	..	70	192	316	381	449	540	648	837
Factories in all China employing over 30 workers (not including Tientsin)	..	..	..	245	673	1,009	1,223	1,347	1,542	1,747	1,975

Reliable material is not available for tracing statistically up to a later date the growth of Chinese industries as a whole, but figures can be given for the cotton industry. The following tables showing cotton mill development till 1933 are published by the Social Problems Research Institute of Tokyo:

Cotton Mills

	1931	1932	1933
Chinese	82	84	89
Japanese	45	41	41
British	3	3	3
Total	130	128	133

Spindles

	1931	1932	1933
Chinese	2,383,000	2,465,000	2,637,000
Japanese	1,630,000	1,715,000	1,790,000
British	169,000	170,000	183,000
Total	4,182,000	4,250,000	4,610,000

Looms

	1931	1932	1933
Chinese	15,918	17,829	19,081
Japanese	13,554	15,983	17,592
British	2,480	2,691	2,891
Total	31,952	36,503	39,564

The development of the weaving side of the industry has lately been particularly marked, as the above figures show. It is important to note, however, that increases in number and equipment, especially in the case of the Chinese-owned mills, has been accompanied by a heavy decrease in output, since many mills have stood idle and there has been a large amount of deliberate 'short time'. According to an index prepared by the Bank of China¹ the volume of business of Chinese-owned mills fell from 100 points in 1930 to 78 in 1931, 52 in 1932, and 35 in 1933, accompanied by a voluntary curtailment of operation which in January-June 1934 implied the suspension in all of 1,224,000 spindles, representing nearly one-half of the total Chinese-owned. This state of affairs has naturally been reflected in a financial crisis for the Chinese companies concerned, whose aggregate capital in the last two years is stated to have been reduced from 37 to 27 millions of Shanghai taels at the same time that the capital of the foreign-operated mills rose from 152 to 190 millions,² while the Government has had to step in to prevent the bankruptcy of the largest cotton combine. This apparent paradox of an expansion of physical equipment combined with curtailment of output and trade is thus explained by the Mill-Owners' Association in their report for 1933:

'In the face of the severe competition of foreign mills, the Chinese owner has had to do his utmost to increase his number of spindles. Only by producing on a larger scale could he decrease the cost of his product. That is why the decline of the cotton industry has gone hand in hand with an increase in the number of spindles ever since 1921.'

It is interesting to note that the latest Chinese mills are practically all erected in rural districts.

The decline in the import of yarn began shortly after the Great War, and has been practically continuous; production has steadily risen over the same period. Reckoning in pounds weight, in 1913 cotton yarn imports into

¹ See 'The Crisis in the Chinese Cotton Industry' by Mr. Leonard Wu in the American I.P.R. Council's *Far Eastern Survey* for Jan. 16th, 1935.

² Ibid.

China were 360 million, while Chinese production, as estimated in Dr. F. D. Fong's *Cotton Industry and Trade in China*, was approximately 225 million; by 1924 imports had dropped to 77 million and production risen to 590 million; in 1929 imports were down to 31 million, while production had risen to nearly 1,000 million. Since then imports have further declined to the low point of under 4 million lb. (27,992 piculs) in 1933, while the output of yarn, though considerably diminished during the crisis (exact figures are not obtainable), has remained well in the hundreds of millions. Thus the once leading import of foreign goods into China has, through the effect of local factory manufacture, come within measurable distance of extinction.

Power-weaving developed more slowly than spinning and it is only within the last two or three years that local output of cloth has caught up with imports. The year 1905 actually marked the high point in imports but, in spite of violent fluctuations due to political and exchange vicissitudes, the import trade kept up well till 1929. Since then the fall has been steep and steady. The decline has, of course, been greatest in the 'plain' classes of piece goods with which local manufactures chiefly compete. These classes began to decline in 1925 when 12 million pieces were imported, a quantity which has since fallen to 9 million in 1929, $6\frac{1}{2}$ in 1930, $3\frac{1}{2}$ in 1931, 3 in 1932, and finally 1.2 million in 1933.

Production meanwhile became substantial after 1915 when the estimated output of factories in China was 45 million yards (say, very approximately, $1\frac{1}{2}$ million pieces), increasing to 120 million yards in 1925 and 590 million yards in 1929.¹ The depression, it is true, has affected Chinese production of cotton cloth no less severely than its importation and the local output for 1931 (the last year for which figures were available) is estimated at 100 million yards only.

¹ Figures estimated by the Chinese Mill Owners' Association and quoted in the *Report of the Cotton Mission* (British Economic Mission to the Far East 1930-31), p. 55.

Imports of cotton piece-goods, therefore, especially of the plain varieties which till lately constituted the bulk of the trade, bid fair to follow the same course as imports of yarn and to dwindle to relative insignificance. In the 1933 China Maritime Customs Report the author notes the heavy and progressive annual decline in cotton import values, amounting to nearly 50 per cent. in 1933, and points out that Japan and Great Britain between them share the brunt of this, Japan's loss being \$30 million for 1933 and the British \$16 million.¹ He further remarks that China spent in 1933 \$162 million less on foreign cottons than four years previously, a fact which emphasizes the diminished size of the market in which foreign and local manufactures meet in competition.

Capture of the local market is, however, not the only achievement of the cotton mills in China. Their exports to foreign countries have reached the point of becoming a significant item in world cotton exports. Of total exports from China itself, cotton goods taken as a whole constitute about 13 per cent. The following table gives a general view of the growth of China's export trade in cotton wares, columns being added to show the balance between import and export (1,000's omitted):

Year	Cotton Yarn (in piculs) (= 133 lb.)			Cotton Piece-goods (in pieces)		
	Export	Import	Import Balance	Export	Import	Import Balance
1913	1	2,685	+ 2,684	0	30,754	+ 30,754
1920	69	1,325	+ 1,256	58	24,737	+ 24,679
1924	146	576	+ 430	1,370	23,165	+ 21,795
1929	344	234	- 110	2,249	26,095	+ 23,846
1931	613	48	- 565	1,478	12,360	+ 10,882
					(in value)	
1932	346	95	- 251	\$47 million	\$113 million	+ \$66 million
1933	541	28	- 513	\$47 million	\$ 56 million	+ \$ 9 million
1934 (first 6 months)				\$16 million	\$ 17 million	+ \$ 1 million

A word should be added concerning the destination of China's cotton exports. Of the exported yarn more than

¹ Although in *value* British exports of cotton piece-goods to China have fallen so heavily, in quantity they have remained fairly constant (at about 2,000 million square yards) since 1930, so that Great Britain has not shared in the total quantitative decline.

one-half goes to Japan and Korea combined, while India¹ takes one-sixth and the Netherland Indies, the Philippine Islands, and Siam small proportions each. In the case of cotton cloth, roughly equal quantities are exported to Japan, to Korea, to Manchuria, and to Hong Kong (for reshipment to destinations which cannot be determined). These four markets take 60 to 70 per cent. of the exports, the remainder being distributed among minor markets which include the Netherland Indies, the Straits Settlements, Aden, Egypt, and East Africa.

Although the cotton industry dominates the picture of Chinese industrialization, at least when viewed from the standpoint of the present volume, other manufacturing industries which are establishing themselves in China must not be overlooked and a short survey will now be given of the position of the more important among them.

Included in the cotton industry itself is the hosiery knitting industry which produces goods for the home market valued at \$12 million a year.

Besides silk and cotton, the Chinese textile industry extends also to woollens and—at present to a very minor extent—to rayon manufacture. The output of Chinese woollen mills is about half a million yards of fabrics (mostly khaki) per annum. The industry shows signs of expansion, especially at Canton, where the local government is establishing a 12,000-spindle mill, the equipment for which was ordered from England in 1933.

Flour mills are, after textiles, the most important industry financially. The number of mills slightly exceeds a hundred, nearly all in Chinese ownership. With the great increase in the importation of wheat (coincident, as it is affirmed, with a change of diet among sections of the population in Central China) the flour-milling industry is likely to continue to expand, at the expense—in so far as international competition is concerned—of Japan, whose mills have hitherto found a good market in China.

Glass, in the form chiefly of bottles and small electric

¹ For the position from India's view-point of China's exports of cotton yarn to that country see p. 273 in Chapter IV.

bulbs, is manufactured in Chinese factories to the value of about \$3½ million a year (comparing with \$4½ million, the value of glass imports).

Cigarette manufacture has made rapid strides largely under the impulse of the foreign interests concerned, headed by the British American Tobacco Company. Native factories grew up and competed keenly, but Chinese taxation has been so severe that a large proportion have had to suspend business.

Rubber goods—boots and shoes for the most part—employ about 40 factories with an estimated aggregate output for 1933 of \$6½ million.

Metal manufactures and the engineering industry have not yet attained to importance from a competitive point of view, though the aptitude of the Chinese mechanic, as shown for instance in the railway repair shops, proves that lack of skilled workmen is not likely to be an important factor in holding back development. It is a fact worthy of notice that aeroplanes were first successfully built in China in 1933. In the light metal industries a considerable advance has lately been made in the manufacture of aluminium articles by small-scale businesses.

After this review of the growth of separate industries we must conclude with a few observations on the general nature of industrial development in China. As already intimated, it has been little subject to general planning or co-ordinated control. We shall come in the next chapter to consider in greater detail the political background of Chinese industrialization; it will be sufficient to point out here that industry in China has developed to its present point in the face of peculiar difficulties, of which not the least have been the absence of central authority able to exert a steady directive influence, the rudimentary means of communication which is all that exists in large parts of the country, the obstacle to the movement of goods represented by an often arbitrary system of local tax barriers, the lack of a single medium of currency throughout the whole country (the dollar-rate varying from place to place and often in a widely fluctuating manner), and finally the

fact that the industrial centres of China are divided between Chinese and foreign administrative control and the industries themselves separated into two sharply distinguished categories, the Chinese- and the foreign-owned. As a result of these handicaps development has taken place in an essentially casual and unregulated manner. There has been, especially in recent years, a rapid growth of new industries in the commercial cities of China, but owing to lack of organization the result has often been local over-production followed by a crop of failures. Encouragement by the Government has been slight and sporadic, while investment support from the Chinese public and banks has been weak for reasons to be dealt with later, and foreign financial assistance, except in the special case of the foreign-owned treaty port mills, has been tapped only very slightly.

The initial advantage which China possessed in the patience, industry, and manual dexterity of her workers and the intelligence and business aptitude of her educated classes was thus negated by her inability to exert a national co-ordinated effort such as led to the remarkably quick industrial development of Japan. Though she owed this inability partly to political circumstances outside her immediate control, she was also hindered from rapid progress by national habits and traditions which will be mentioned more specifically in the second section of this chapter.

One such handicap, which may be at once noted as being further illustrative of the differences between Chinese and Japanese development, lay in her slowness to take advantage of foreign technical training and assistance. Whereas in Japan students were sent abroad to train and foreign technicians imported as part of the national policy, there was in the case of China no similar organized attempt to profit by Western advance. Foreign specialists were seldom engaged except when their employment was stipulated as part of the terms of a foreign loan contract, as in the case of the railways, and the sending of students for technical education abroad was left mainly to private initiative. The 'returned students' themselves have played

a comparatively minor part in the industrialization of the country, this being due partly to the smallness of their numbers, partly also, perhaps, to a certain prejudice which is said to exist against their employment on the ground that their expectations of salary are too high for local standards and that they are apt to show an unwillingness to enter 'low down the ladder'. However this may be, it is certain that China has not, in the matter of industrial development, modelled itself systematically on the West, though this is partly compensated for by the existence in China of foreign-owned factories conducted on modern lines, which in practice have served the purpose of models.

These foreign-owned factories form a separate class (as will be shown later when their organization and financial position is discussed) to which the preceding remarks do not for the most part apply. Their development has been the result of regular organized effort, especially in the case of the large cotton companies which own most of the cotton mills. These latter have grown up with solid financial support. Having greatly superior reserves and a more conservative organization, they have, as a class, weathered the recent depression far more successfully than the factories owned by Chinese. Their position is closely linked up with the development of the treaty ports in which they are chiefly situated and where the shipment and handling of imports and exports, the processing and packing of the latter, banking and other essential services connected with overseas trade are mainly in the hands of the foreigners—or, if not of the foreigners themselves, of specialized classes of Chinese business men working in close conjunction with foreigners. The treaty ports, being the emporia for foreign trade and having, for this reason and because of the security offered by foreign-controlled territory, drawn to themselves a disproportionately large part of the wealth and enterprise of China, are the nuclei of industrial development both foreign and Chinese. In recent years important changes have, it is true, begun to take place in regard to this situation. The political status of the ports themselves, involving

foreign control, is being modified both by treaty revision and by the unilateral curtailment by China of foreign rights and privileges. Simultaneously the characteristics of treaty port trade are being weakened and diluted by the growth of direct trading between the Chinese importer and the producer abroad, by the rise of Chinese 'foreign style' banks and of similar institutions, and by the opening up of the interior to the enterprise of the great 'distributing' companies engaged in the sale of tobacco, petroleum oil, chemicals, &c. Nevertheless, the existence of the treaty port system remains a vital factor in Chinese industrial development.

The fact has already been mentioned that a large fraction—estimated at four-fifths—of the cotton cloth consumed in China still comes from the native hand-loom scattered over the country. Though Chinese 'cottage' industry affects world commerce mainly in so far only as it competes with imports in meeting domestic demands and releases Chinese factory production for export to other markets, its importance in the future economy of China is capable of being so great that it cannot be left out in a survey, however brief, of Chinese industrialization. Even in highly industrialized Western countries a reaction has lately set in in favour of scattered small-scale industries as economically desirable, if only as a safeguard against the recurrent phases of unemployment which seem to result inevitably from the mechanization and 'rationalization' of industry. In China, which still stands at the parting of the ways, there is a strong academic body of opinion, shared and supported by some political leaders, on behalf of the principle of dispersing industrial activity over rural areas as opposed to the encouragement of large-scale units in industrial cities. A dense population of farmers with a large margin of time available for side-occupations¹ and a tradition of home industry, helped by increasing communications and the spread of electric power, make the decentralization of Chinese industry a more practical pro-

¹ Professor Buck's study of farm labour shows an average of only about 95 days a year spent directly on farm work.

position than it would be in most countries. Especially in the north of the country, rural industries have long existed, in some cases on almost a mass-production scale, though in very ill-organized conditions. As regards organization, however, a considerable amount of research, educational, and experimental work has been done in recent years, chiefly in connexion with agricultural credit, farmers' co-operative societies, and the improvement of machinery and methods—the work being often linked up with wider schemes, both private and official, of mass education, public health, cultural progress, &c.

Rural industries in China are not always an alternative form to large-scale urban industries; they are in some cases complementary. This is so in the textile industry where certain processes, e.g. dyeing and finishing, are 'farmed out' by the manufacturers in the towns to home workers in the country. In addition to established industries including, besides those just mentioned, hosiery knitting, paper making, pottery, glass, and carpet manufacture, there have been recent attempts at the scientific introduction of new rural industries, the necessary training of the local populace being a part of the scheme. Wool manufacture and iron smelting are among the trades which it is hoped thus to establish.

It has been pointed out by Dr. Fong in his *Rural Industries in China* that the products of rural industries are by no means confined to the local market. 'In a large number of cases', he states, 'they figure prominently in domestic or foreign exports', and he gives a list of sixteen types of exports from China supplied from the product of rural industries. He adds, it is true, that most of these have declined in the last half-century, but there are signs of the possibility of a reorganization along modernized lines which may very possibly lead to a revival and fresh development.

To sum up in a few words, modern industry in China dates back barely forty years. It started at a time when trade with Western countries was already long established, when the Chinese had developed a steady demand for a

variety of foreign manufactures, and when factory-made cottons had come into vigorous competition with the handloom product. Aided by the abnormal conditions attending the Great War, when China was cut off from many of her principal sources of import, factories in China, partly Chinese partly foreign-owned, expanded rapidly, especially the cotton mills, the most important class of all. Since the War industrial development in China, while experiencing the succession of booms and slumps more or less common to all industrial centres, has made substantial growth and in the case again of cotton goods has reached the point of replacing imports to a very large extent and of contributing a by no means negligible quota to world exports. In other lines of manufacture of a competitive nature China has lately shown considerable capacity for expansion in such commodities as glass, cigarettes, and rubber goods, though these are still minor industries. Industrial development has been subject to little regulation and has taken place in two essentially separate directions, the Chinese-owned on the one side, the foreign-owned on the other. Finally, parallel with factory development in the treaty ports and other cities, rural manufacturing industries have persisted among the peasants and, though many are now declining, others have been invigorated or revived and, under more scientific direction, represent a significant development of Chinese industrialization.

§ 2. GOVERNMENT POLICY TOWARDS INDUSTRY

(a) *National Industrial Policy*

Reference was made towards the end of the previous section to the duality in China's industrial structure due to the existence side by side of Chinese- and foreign-owned factories. This state of affairs makes it peculiarly difficult to generalize about industrial conditions, and the most practicable method of treatment will be to divide the subjects to be discussed into two classes, dealing first with those of a rather more general nature affecting factories as a whole, and subsequently with those in dealing with

which one is forced to differentiate between Chinese- and foreign-owned units. At the head of the former category we must place the political state of China and the relations of the Nationalist Government to industry.

The existence, or non-existence, of a central authority able to assure law and order and guarantee peaceful development is fundamental to the whole question of China's economic reconstruction. It would be beyond the bounds of the present study to discuss in any great detail the status of the Central Government and the internal political state of the country. In general, however, it may be stated as a commonly recognized fact that, although China's recovery from a state of political disruption and widespread military domination is proving a slow process and subject to frequent set-backs, there is a visible movement towards greater unity and a stronger system of governmental control. On the other hand it is more than questionable whether the degree of stability necessary for a native industrial expansion on a really large scale exists in China at the present moment. The chances of civil war, the danger of local disorders, the risk of oppressive action by irresponsible local authorities are strong deterrents to progress over the greater part of the country. In the larger towns, one should add, conditions become increasingly stable and central government control, whatever be the position in regard to China as a whole, is moderately well established over the region of Central China where modern industry is for the most part to be found. Another important fact is the unusual power of resistance to adverse political conditions possessed by the Chinese people, of which we have frequent examples in the tenacity shown by the peasants and merchants in maintaining agriculture and trade in the face of civil unrest. Finally political instability is, up to a point, discounted by the fact that interior disorders tend to concentrate wealth, and so to stimulate production, in the foreign-controlled areas, which are the chief centres of manufacture, though against this has to be set, of course, the corresponding impoverishment of the domestic markets which those

centres serve and the disorganization of the districts supplying their raw material.

The existence of extra-territorialized areas is, meanwhile, *per se* a hindrance to industrial development on any national basis because it perpetuates the duality referred to above consisting of two separate categories of manufacturing enterprise, the Chinese and the foreign. It limits the effective scope of any industrial policy adopted by the Chinese Government, and it prevents the creation of unified systems of control and organization.

Bearing this limitation in mind, we will proceed to the Government's policy towards industry. In the first years of the Nationalist Government when its political orientation was still undetermined, there was considerable uncertainty as to whether industry in China would develop under a socialist or a capitalist system, an uncertainty which had a retarding influence upon the growth of industries. Although the respective fields of private enterprise and of State undertakings still remain imperfectly defined, the present Government has done a good deal towards clarifying the position. Nothing in the nature of State socialism has been adopted, or is threatened, and individual enterprise is allowed much the same freedom as that enjoyed in most of the capitalist countries. Taking railways as an example, although by far the greater part of China's railway system is Government-owned, construction and ownership by private companies is both permitted and encouraged, as an illustration of which one may quote the recent building of the Hangchow-Kiangshan line by a syndicate of Chinese bankers.

This does not mean that the Government in China, whether central or provincial, disinterests itself in industry. On the contrary, planned industrial development occupies a prominent place in the Government's schemes for economic reconstruction. The broad lines of their industrial policy consists in the following: (i) the operation, in principle, by the State itself of the heavier industries, leaving to private enterprise all others except those which may be declared State monopolies (tobacco

and matches have been officially suggested) or such as are considered to be of national strategic importance;¹ (ii) Government collaboration with private finance in the establishment of new enterprises; and (iii) Government encouragement and support of the major established industries, such as silk and cotton, and the active promotion of home industries in competition with imports from abroad. In broad terms, the Government policy aims at industrial self-sufficiency within the limits suited to China's present economy.

These principles are at present represented in plans for the future rather than in effective Government measures. Government factories are few, although serious projects have lately been started to establish certain State-owned 'key' industries including an iron and steel works, an ammonium-sulphate factory, and a 'Central Machine Shop'. Schemes for more purely commercial enterprises (such as a paper mill to cost \$5 million furnished partly by the Government, partly by public subscription, and a Government factory of commercial alcohol and another for rayon) are under consideration.

State encouragement of existing industries has taken form in protective customs duties and Government subsidies to depressed industries, notably silk.

Since China was freed in 1928, as the result of international agreement concluded at the Washington Conference, from the 'servitude' of a fixed conventional tariff, there has been a succession of rising import tariffs, the last of which was promulgated in July 1934. Whereas until very recently the Chinese Government has used the tariff almost solely as a revenue-raising instrument, it is now showing a growing tendency to treat it—even at some financial sacrifice—as an instrument of national economic policy. The 1933 tariff was thus made to bear far more heavily than before on cotton goods,² which in the case of

¹ A State monopoly of aluminium and tungsten deposits in certain provinces has been declared.

² This was made possible by the expiry in 1933 of China's treaty with Japan of May 30th, 1930, by which she bound herself not to raise the

coloured piece-goods pay as much as 30 per cent. *ad valorem*, and its effect in restricting imports and *pro tanto* encouraging home production is reflected—with other contributory factors—in the steep decline of imports of cotton goods referred to in the previous section.

The benefit to Chinese exporting industries of tariff protection was set off by the introduction in 1931 of increased export duties, averaging $7\frac{1}{2}$ per cent., applying to all the staple articles of China's export trade except silk. As will be mentioned again later, the Government are now adopting the policy of encouraging certain classes of home industry by granting exemption from this duty.

For the cotton industry a 'Cotton Industry Commission' was set up in October 1933, under the auspices of the National Economic Council, consisting of representatives of cotton-growers, merchants, and manufacturers under the chairmanship of a banker. Its function is to stimulate the production of raw cotton in China and improve conditions of transportation and marketing, to establish research into seed selection and set up testing centres, and to organize the finances of the manufacturing section of the industry and promote the replacement of obsolete manufacturing machinery. Having dealt first with the raw materials, it proposes to establish eventually standards of factory equipment and operation as well as of working conditions. The Commission is thus intended to exercise a comprehensive control over the entire cotton industry of China, though this control, as has been pointed out by its chairman, does not imply nationalization nor the elimination of private capital but rather the 'pooling of intellectual resources and technical knowledge to form a united front'.¹

The establishment of this Cotton Commission was the first important act in the industrial sphere of the National Economic Council set up in 1931, with the help and participation of the League of Nations, to assist the Chinese

import duties on specified articles, including cotton goods, in which Japan was interested as an exporter.

¹ A similar Commission deals in the same way with silk.

Government in economic matters. The Council was entrusted with Government funds and invested with wide powers to plan, supervise, and direct 'reconstruction' projects and, in special cases, to act as their agent for executing such projects.¹

For the encouragement of home industries as a whole regulations recently passed provide for exemption from export duty, for the reduction of import duties on raw materials required and of transport freights, and for the giving of Government grants. These privileges apply to Chinese manufactures competing with foreign imports, goods manufactured for export, and newly established industries. To enjoy the benefit of these privileges companies must have their entire capital in Chinese ownership. How widely such regulations will operate and how effective the Cotton Commission will be are questions for the future to answer. Their effect upon foreign investment in China will be discussed later.

Chinese industry and commerce were till lately comparatively free from legislative and administrative control of a regular nature. A change has come, however, in recent years, through the enactment of a large body of new laws and administrative regulations affecting commercial establishments. These include company and factory laws, the establishment of National Bureaux of standards, trademarks, &c., and Government inspection of export merchandise, besides fiscal measures such as the recently imposed 'business tax' on capital and turnover. Much of this recent legislation being again only partially operative, the effect on industrial development is as yet indeterminate. In so far as taxation is concerned there is a noticeable tendency to increase its regular forms as distinct from irregular levies. In a period of revenue deficiencies

¹ For a statement of the origin, functions, and activities of the National Economic Council see the report to the League of Nations by the League's technical agent on the Commission, Dr. L. Rajchman, dated April 1st, 1934. The Council consists of the head of the Government and the Ministers principally concerned and of eleven appointed members from among bankers and industrialists. Its exact relationship to the Government has not been publicly defined.

combined with heavy military expenditure the contributions to be exacted from business and industry in the shape of excise, &c., cannot be light, particularly in view of the fact that it is not practical, with the official machinery which at present exists, to levy income tax and other direct forms of taxation. A basis of comparison with the taxation burden in other countries cannot be established, but as an indication of the extent of 'legal' taxation it may be mentioned that the 'consolidated taxes' produced in 1932 from the five major industries, namely, tobacco, cotton yarn, flour, matches, and cement, a sum amounting to \$79 million.¹

Labour and factory laws, based largely on Western models, are among the recent additions to China's legal codes. The period between 1929 and 1931 saw the promulgation of an Industrial Dispute Act, a Factory Act, a Labour Union Law, and a law for Factory Inspection. The Factory Act prohibits night work for women, limits hours of work and the ages of workers, prescribes conditions for their safety and welfare, and provides for the setting up of Factory Councils. It is generally felt, and appears to be recognized officially, that the labour laws set a standard very materially beyond what is immediately attainable in China and if applied literally would completely dislocate the industries concerned.² In 1934 it was decided by the Government that the Factory Act should, therefore, be applied by gradual stages,³ and it seems safe to presume that restrictive regulations of work-

¹ See C. L. Nieh, *China's Industrial Development*, prepared for I.P.R. Conference, 1933.

² In the *Monthly Bulletin of Economic China* for March 1934 a writer refers thus to the Chinese Factory Act: 'A mere glance will show that the Act as it now stands has no relation whatever to the actual industrial conditions of the country. Many of the provisions . . . will mean not only a material increase in the cost of production for the already tottering industries in China, but also a partial, if not complete, suspension of work for the industries employing child and woman labour, notably cotton spinning and silk reeling.' The provisions to which the writer alludes include prohibition of employment of children under 16 years of age and of night work for women, as well as the introduction of a weekly holiday.

³ Meantime an important practical step was taken in 1931 by the establishment of a Training Institute for Factory Inspectors.

ing conditions will proceed comparatively slowly. In the meantime, factory regulation in the Shanghai Settlement under international control has also been slow to develop owing partly to the natural disinclination of the Municipal Council to handicap local factories with restrictions more severe than those actually enforced on neighbouring Chinese territory, and partly also to the difficulty of agreement with the Chinese authorities concerning the functioning of Chinese factory inspectors inside the Settlement boundaries. China, it may be added, has been represented at the last two Geneva Conferences of the International Labour Office and was elected to a place on its Governing Body in 1934.

Lest this description of the Chinese Government's action towards industry should convey an impression of a higher degree of organization and clearer political ideals than in fact exist, it should be read in the light of the fact that while with one hand the Government pursues a policy of encouragement, with the other it still treats industrial enterprises, like all other profit-producing agencies, very much as a lamb to be shorn and that in very many cases the Government's interest in industry appears chiefly as that of a tax-collector.

(b) General Characteristics of Labour and Industry

We now turn to labour as the next on the list of governing factors in Chinese industrialization. Crude labour for industrial development is virtually inexhaustible. A great improvement in agrarian conditions might, it is true, affect the flow of labour to factories, but an improvement on such a scale is, unhappily for China, a decidedly distant prospect. In the meantime factories can count on being able to draw almost indefinitely on the agricultural population at least for short-term workers. As in Japan,¹ the labour 'turn over' in the factories is rapid, the village people—the women especially—coming to industrial centres to work for a year or two, after which they return

¹ See Chapter II, p. 112.

home with their savings. At Shanghai, according to Dr. H. D. Fong's inquiries, 50 per cent. of the workers leave within three years, and although this includes a great deal of migration from older to newer factories in search of better wages, it illustrates a general characteristic of the Chinese labour market.

Mr. Arno Pearse, in his report compiled in 1929 for the International Federation of Master Cotton Spinners' and Manufacturers' Associations, draws a contrast between Chinese and Japanese labour. He emphasizes the crudeness, illiteracy, and absence of a natural sense of cleanliness and neatness (together, it may be added, with an ingrained lack of discipline) which marks the former in comparison with the latter. He proceeds, however, to quote the statements of owners of Japanese mills in China to the effect that Chinese workmen are very educable and that, after training in modern factory methods, they prove themselves little inferior to the better educated Japanese millhands. This potential efficiency of the Chinese worker, male and female, receives general corroboration, but recent Chinese researches into wages and standards of living indicate that in present conditions they are limited as to efficiency by the extremely low level of these wages and standards which seriously impair the average worker's quality, being hardly sufficient to maintain a normal state of vitality. The result—as pointed out by Dr. Ta Chen, Professor of Sociology at the Tsing Hua University—is a vicious circle; low wages depress output and this again holds down wages. Other writers rate Chinese industrial wages as being at a 'bare subsistence' level.¹

Money wages in Chinese spinning and weaving mills—where the hours of work are from 11 to 12 hours for seven days in the week, special holidays excepted—are extremely low, averaging, it is estimated, under 10 Chinese cents (say 1½d. to 2d.) per hour.² Monthly wages, as assessed through an inquiry covering twenty-one separate industries, amounted to \$17 for men, \$10.60 for women (say

¹ See *Standards of Living among Chinese*, I.P.R. Conference Papers 1931 by L. K. Tao.

² See *China Year Book* for 1933.

28s. and 18s. at current rates of exchange). These figures show that, even when supplemented by such bonuses, social services, and 'allowances in kind' as the factory hand enjoys, the Chinese workman stands near the bottom of the scale for wage-earners in any part of the world. As regards these supplementary payments, the giving of bonuses especially at the New Year is an accepted practice in China and adds an appreciable fraction to wages; social services on the other hand hardly exist in normal conditions in Chinese factories on a scale to affect the question of labour costs, though special educational facilities have of late years been introduced. 'Allowances in kind' in the case of the cotton industry include usually the provision of lodgings at nominal rents and cheap facilities for meals. Balancing wages against output in China and Japan, Mr. Pearse suggested in 1929 that while individual wages in China were about one-half of what they were in Japan, individual efficiency may be 20-50 per cent. lower.¹ Dr. H. D. Fong,² comparing efficiency as between Chinese and Japanese-owned cotton mills in China in 1930, gives the following figures based on investigations covering from 40 to 70 mills:

	<i>All Mills</i>	<i>Chinese</i>	<i>Japanese</i>
1. Spindles per worker	19	16	24
2. Looms per worker	0.73	0.58	1.10
3. Yarn output per worker per year (bales)	10.70	9.855	11.95
4. Cloth output per worker per year (pieces)	414	261	786

This analysis is useful as showing the differences between the two classes of mills in China. It is interesting, but perhaps somewhat dangerous owing to differences in methods of calculation, to set against Dr. Fong's figures those given in the previous chapter relating to mills in Japan. Reducing to the same denominations as in the

¹ *Japan and China Cotton Industry Report*, p. 150.

² *Cotton Industry and Trade in China* (Nankai University), vol. i, p. 94.

above table the data given in that chapter,¹ we find that the figures under the four headings for Japanese workers' efficiency corresponding to those for Chinese workers are as follows: 54 spindles per worker; 2.33 looms; 16 bales; 1,700 pieces. These figures indicate a remarkably wide difference in 'per worker' efficiency between the mills in Japan and in China, especially in the weaving section, where the difference may be largely accounted for by the use in Japan of automatic looms.

Wages and costs of living in China have been less subject to fluctuations, especially during the world depression, than in most industrial countries. A cost-of-living index compiled by the Chinese National Tariff Commission shows the following broad movements in the course of five years:

	<i>Total cost of living</i>	<i>Food only</i>	<i>Clothing only</i>
End of 1926 . . .	100	100	100
End of 1931 . . .	125.9	107	108
End of 1933 . . .	103.2	83	87

The slight rise in total cost of living between 1926 and 1933 here shown occurred mainly under 'rent'. As has been pointed out in Sir Arthur Salter's Report,² there was a disproportionate drop in food prices, the price of cereals in Shanghai in 1933 being only about one-half of that in 1930. During the first nine months of 1934, for which cost-of-living figures are given in the *Monthly Bulletin on Economic China*, the index for Shanghai shows a rise of ten points, but this rise will presumably be corrected by the continued appreciation of silver which has since occurred and which has had the effect of depressing prices generally and particularly those of foodstuffs.

The standard of living among the Chinese masses as a

¹ See tables given on pp. 119 and 120.

² *China and the Depression*, published by the National Economic Council, Special Series No. 3, May 1934. A slightly abbreviated version appeared as a Supplement to the London *Economist* for May 19, 1934.

whole is considered by Sir Arthur Salter as being only half as high as among the peasants of India. The comparison of standard is notoriously difficult, but it can be safely asserted that the Chinese standard, including that of workers in industry, is, as has already been said of their wages, situated near the bottom of the world scale. The conditions generally of industrial labour in China were discussed at the I.P.R. Conference held at Shanghai in 1931 and the result was summed up as follows in the printed Conference proceedings:¹

‘Many competent observers report to the effect that the conditions of industrial workers in most of China are with few exceptions bad, and in many cases atrocious, even by comparison with other Asiatic countries. Not many persons claim that the Chinese urban or industrial worker has reaped any of the benefits which ought to flow from the introduction of modern industrial processes. When allowance is made for the higher cost of living in the cities, for the unwonted rigor of factory discipline, and for the risk of industrial accidents and disease, there is little to suggest that the factory labourer fares better than his peasant brother. There is, indeed, definite evidence that he fares worse than the average craft worker.’

Factory labour is recruited for the most part straight from the countryside. According to an authoritative article on the ‘Regulation of Industrial Conditions in Shanghai’ printed in *Oriental Affairs* for May 1934, many of the Shanghai mills obtain their operatives through labour contractors who make themselves responsible for the supply and exercise authority over the workers. The contractors pay out money for initial expenses, travelling, advances to the parents of juvenile workers, &c., and recoup themselves at high rates of interest from the subsequent earnings of the workers themselves, who are forced to accept the lodging and food which the contractors supply. The result is described as being, in some cases, little removed from slavery. This contract system is stated, however, by Chinese investigators to be on the decline.

As regards the composition of Chinese industrial labour,

¹ See *Problems of the Pacific, 1931*, part ii, chapter v.

calculations of the proportion of female labour vary from 45 per cent. to 60 per cent. covering all industries, while child workers are estimated to be about 6 per cent.¹ The proportion of female and child labour is particularly high in the textile industries. No dependable index of industrial occupation among the Chinese is, unfortunately, available. Figures published by the Nanking Ministry of Industry cover only nine of the more highly industrialized provinces and omit the important centre Tientsin. The total number of 'factory workers' in the nine provinces is given as 1,204,000, including, of course, workers in small workshops. The distribution of these among industries provides a certain guide to the relative development of the various industries concerned. Textile factories as a whole employ 47 per cent., while cotton spinning alone employs 17 per cent., and cotton weaving 9 per cent., the silk-reeling industry accounting for the greater part of the remainder. No other single industry represented in the Ministry's occupational table shows a percentage exceeding 5 per cent., tobacco manufacture and printing being the next in order of importance.

In spite of the transient nature of most of Chinese industrial labour, the labour union movement is well established and unions exist in the majority of the principal industries. The movement flourished during the period around 1925 and 1926 when Russian communist influence was prevalent in China, but in more recent years its advance appears to have been slow and it would appear that effective union membership applies to less than half the total number of workers in factories employing 30 or more.² Organized strikes are common. In 1932 there were 104 strikes, the largest number occurring in the textile industry.³ Of these 30 per cent. had to do with wages and about 40 per cent. were protests against factory

¹ See C. L. Nieh, *op. cit.*, quoting investigations by the Chinese Ministry of Industry and the paper prepared for I.P.R. Conference 1933 on the Cotton Industries of Lancashire and of the East by the Royal Institute of International Affairs.

² *China Year Book*, 1934, pp. 247-8.

³ *Ibid.*, p. 365.

methods or the treatment of workers. The strike weapon has proved moderately effective in obtaining rises of wages and improvements in working conditions.

To sum up what has been written on labour, the supply is inexhaustible and the quality potentially high according to Eastern standards. Individual efficiency in present conditions is low owing to a general lack of training and supervision and to a depressed standard of existence consequent on low wages. Labour is mostly 'short term' and there is but a very small class of regular industrial workers. Chinese factory operatives show under present conditions a proneness to resort to strikes and to be readily influenced by union leaders and political agitators. In factory conditions and general welfare of workers, where there is much ground to be made up, progress is counteracted by certain features of custom and tradition, by the lack of trained Government officials, and by the difficulties of co-ordinating action between Chinese and foreign authorities.

We will now leave the subject of labour—to which, however, we shall have to revert when we come to consider the position of the foreign-owned factories—in order to turn our attention to factors bearing somewhat less directly on industrial development.

Currency instability is one of the major handicaps to China's industrialization, as it is also to her trade. The instability is twofold; external, in relation to foreign currencies, and internal, in relation to prices and the varying rates of exchange between different centres in China. The fluctuation in exchange value between silver and gold is a difficulty with which China merchants and industrialists have always had to cope. In the past they have shown themselves eminently successful in adapting themselves to exchange movements, which, except during the Great War, have usually been gradual. The movements in silver since the beginning of the world crisis, beginning with its sudden fall and ending in its artificial recovery, have, however, been too rapid and unpredictable for the manufacturer and merchant to deal with, and the effect on all

business in which foreign exchange is involved has been disastrous. China's detachment from gold saved her during the first years of the crisis from the collapse of values which took place in 'gold' countries. The term 'detachment' applies in a large sense. Because the farming population use the vast bulk of what they produce for their own consumption or for paying their dues to their landlords, and because of the vast area of the country and its poor communications, the whole economy of China is to a singular degree dissociated from currency factors, so that the influence of external prices penetrates far more slowly and to a less extent than is the case in most other countries. Since 1932, however, when these other countries had begun to abandon the gold standard, silver started on an upward movement, greatly intensified by the silver-purchasing policy of the U.S.A., which led to a steady drain of silver from China.¹ The inevitable result on China was a serious price deflation which the Government has been able only slightly to rectify by restricting the export of silver in so far as is possible in the face of persistent smuggling, and holding the exchange value of the dollar at a point below its silver parity. Prices fell, especially those of agricultural produce, and money tended to leave the interior and accumulate in the bank vaults in Shanghai where it remained idle or was shipped abroad.² The fall in wholesale prices is shown in the following table:³

1926	index number	100
1929	" "	105
1930	" "	115
1931	" "	127
1932	" "	112
1933	" "	103
1934 (Oct.)	" "	96

Although China's national currency is thus at the mercy of sudden changes in the world price of silver, its stability

¹ Previously to this a large quantity of gold had left China.

² For a review of the effect of silver on China's economic problems see *Pacific Affairs*, March 1935.

³ Figures compiled by National Tariff Commission and published in the *Monthly Bulletin on Economic China*.

in terms of silver itself is noteworthy and implies a degree of confidence in the currency medium which compares favourably with the state of affairs in many countries under more organized government. This may have been partly due to the use in the past of bullion in the shape of the tael (a block of silver of specified weight and purity manufactured by private smelters) as the principal medium for large-scale transactions. The tael persisted up to 1932 when the Chinese Government ordained its abolition and the substitution of the Government-minted dollar. Its wide use tended to lessen the dependence of the trading community on paper currencies. It is true that many provinces have suffered severely in the past from the irresponsible issue of paper notes and particularly from the so-called 'military' notes imposed by local militarists, which have often depreciated heavily, or even become valueless, to the great detriment of merchants and others.¹ Further it must be borne in mind that throughout the 'interior' of China and among the poorer elements of the population generally copper coins form the basis of currency and are used for all minor transactions, so that it is commonly said by experts on Chinese currency questions that the country possesses a double metallic standard. The vagaries of provincial paper currencies and of the copper/silver exchange are consequently a serious factor in Chinese economies as a whole and affect industrial development through their influence on the prices of home-produced raw material and the purchasing power of the peasants. In so far, however, as industries of the modern type are largely concentrated in a few important centres, and primarily in Shanghai, they benefit by the comparative immunity from abnormal currency fluctuations which these centres enjoy. A small number—some seven or eight—of the principal 'modern' Shanghai banks are nowadays responsible for the bank-note issues in use throughout a great part of China. The conditions of issue

¹ The outstanding example of paper currency depreciation on a large scale occurred in Manchuria under the previous régime, where currency manipulation by the governing authorities was notorious.

are regulated by the Government, which requires the banks to hold a 60 per cent. ratio of specie reserves and to publish monthly statements, and the notes have, with very minor exceptions, retained their face value for several years past.¹ Meanwhile, to revert to the silver currency, the new 'standard' dollar minted by the Central Government, which has legally superseded the tael, has now become the national currency unit. Doubts engendered by the substitution of a minted coin, whose purity depends on Government guarantee, for the traditional tael which was safe from manipulation, have so far proved groundless and the new dollar and the notes secured upon it appear to be firmly established.

The introduction of the 'standard' dollar has not, however, done away with a serious handicap which affects all business in China, namely, the existence of fluctuating rates of exchange between various points in China. Remittances from one town to another vary from a cent or two in the dollar as between Shanghai and Tientsin to anything up to 25 or 30 per cent. at the more remote trade centres, e.g. on the Upper Yangtze. The state of affairs has lately been made worse by the drift of dollars to Shanghai. This depletion of silver stocks in the interior of China is due partly to local unrest, partly, as stated already, to the fall in value of agricultural produce resulting in the shrinkage of up-country exports to the coast, and partly again to transport and tax difficulties in the interior of the country; its continuance or otherwise there-

¹ The following table, published in the *Monthly Bulletin on Economic China*, vol. vii, no. 1, p. 33, shows the expansion of the note issue over a recent ten-year period:

1923 . . .	\$573,528,000
1924 . . .	\$636,163,000
1925 . . .	\$763,738,000
1926 . . .	\$887,344,000
1927 . . .	\$908,020,000
1928 . . .	\$1,056,358,000
1929 . . .	\$1,221,940,000
1930 . . .	\$1,420,521,000
1931 . . .	\$1,603,905,000
1932 . . .	\$1,661,911,000

fore depends on an improvement of conditions both in the outside world and in China itself.

In passing on to finance we come to a particularly crucial factor in industrial development in China. The science of banking is older in China than in most of the rest of the world and when the country entered the era of modern industry it already possessed in the old 'native' banks the elements of an efficient banking system. On this foundation there has arisen an up-to-date structure of 'foreign-style' banks concentrated mainly in Shanghai. The management of the leading 'foreign-style' banks is universally recognized as being highly able and skilful in adaptation to modern requirements. The commercial banks, led by the Bank of China, have shown themselves possessed of substantial reserves of strength in times of financial crisis, although it is true that, as large creditors of the Central Government, their position is at all times uncomfortably dependent on the political situation. A more immediate threat to their solvency has recently arisen through the rise in the world price of silver and consequent heavy drain of the metal from China, gravely depleting available stocks. The growth of modern Chinese banking can be seen from the following figures¹ derived from the balance sheets of eleven of the principal institutions:

(In millions of dollars)

<i>Year</i>	<i>Capital and Reserves</i>	<i>Assets</i>	<i>Deposits</i>	<i>Loans</i>
1923	77	644	403	418
1924	83	723	463	478
1925	88	890	561	583
1926	90	1,047	687	669
1927	92	1,067	692	676
1928	94	1,261	860	773
1929	95	1,406	981	956
1930	99	1,644	1,195	995
1931	111	1,878	1,393	1,204
1932	114	1,981	1,455	1,203

¹ Figures from tables by Mr. T. N. Lee, Assistant General Manager of the China State Bank, in 'The Development of the Modern Chinese Bank', in the *China Journal* for May 1934.

In spite of this growth of a modern banking system, the supply of capital for the use and development of industry is very restricted. The idea of investment in joint-stock companies is still unfamiliar to the great majority of the Chinese public, and in spite of the accumulation of silver at Shanghai, interest rates are excessively high. This is largely on account of the borrowing activities of the Government whose requirements monopolize the markets, the effective yield on the better-secured Government loans being in the neighbourhood of 8 per cent. At the same time the world depression, by impoverishing the wealthy Chinese colonies overseas, has placed a check on a fruitful source of investment funds. The position is changing, it is true, in that the leading Chinese banks are making determined efforts to infuse money into industry. In the case of the Bank of China the annual report for 1933 shows that loans to industry, amounting to \$42 million, were \$4 million more than in 1932 and \$11 million more than in 1931. Of these loans 56 per cent. went to cotton mills and \$8 million were advanced against raw cotton.

More and better communications are usually ranked as China's chief economic need. In so far as industry depends on the transportation of fuel and raw material the existing railway system and coastal and river services are well adapted to this purpose. The chief manufacturing centres are disposed at points on the China coast and on the central Yangtze—namely at Tientsin, Tsingtao, Shanghai, Hankow, and Canton. The principal active coal-fields lie in the north-east where the Kaip'ing fields have their own shipping port at Chinwangtao, and along the Peking-Hankow and Hankow-Canton railways (the latter being now in process of completion after a long period of suspended construction). Iron ore is mainly produced in the neighbourhood of Hankow and the most important cotton-growing districts have grown up in railway-served areas in Hopei in the north, in Shantung, around Shanghai, and in the Hankow region. Thus the industrial centres for the most part are linked to the producing areas by rail and steamer routes. The main hindrances thus arise less from

actual lack of physical communications than the check on the movement of goods by excessive transportation taxes and similar 'administrative' obstacles.

The shortage of railways and roads affects more closely the distribution of factory products in the interior markets. By restricting the general exchange of goods it is also a serious factor in keeping consumptive power at its present low level. The very exiguous, albeit well-established, system of railways which China at present possesses is being slowly extended, but the rate of progress is limited both by internal political conditions and by the lack of capital for development. Imported capital is essential, but this is difficult to procure since, owing to past defaults, the Chinese Government's 'railway' credit stands at an almost prohibitively low level, though a slow improvement has been apparent during the last few years. It is hardly necessary to refer to the complications which the Sino-Japanese political situation further imports at the present time into the whole question of foreign loans to China.

In the building of roads progress has been rapid, assisted by the efforts of the National Economic Council with technical assistance from the League of Nations.¹ The construction of thousands of miles of roadways (although by no means an effectual substitute for railways) is opening up new districts in most provinces of China to mechanical transport wherever local taxation is not absolutely prohibitive. It must, however, be mentioned that experience hitherto indicates that the new roads of China serve mainly for passenger and military transportation and only to a minor degree for the movement of merchandise.

China is better placed than Japan in regard to the proportion of her domestic supplies of fuel and raw materials to her present scale of industry. How far she possesses the reserves necessary to support a substantial expansion of her industries is another, and a very conjectural, question, since the extent of her resources is by no means accurately known and her capacity to increase

¹ See pp. 202-3 above.

her output of agricultural products, such as silk and cotton, depends on incalculable factors.

Basing ourselves upon the latest and most generally accepted estimate of production and reserves, we can, however, form a general idea of China's present position in comparison with other Pacific countries and in relation to world figures.

In regard to fuel, it has to be noted that China's dependence upon domestic supplies is lessened by the fact that her factories chiefly exist at seaports where foreign coal can be easily and cheaply imported. Native coal resources are, nevertheless, a prime factor in development. China's position in this respect is not unfavourable. She is on balance an exporter of coal. The output of the coal mines of China proper is about 17 million tons a year, comparing with the following figures¹ of other 'Pacific' countries:

Japan and Korea	29,000,000 tons (approx.)
Manchuria	9,000,000 tons "
Canada	11,000,000 tons "
U.S.A.	400,000,000 tons "

Of the total world production China's share is rather less than $1\frac{1}{2}$ per cent. At the present time only about one-third of the output is absorbed by manufacturing industries, the greater amount being employed for domestic purposes, while 8 per cent. is exported. It may be added that production approximately doubled between 1913 and 1929.

Most of the coal is bituminous though there are considerable anthracite deposits; the quantity of lignite is almost negligible. From the metallurgical point of view a fair proportion of the coal is of a useful coking quality, particularly that derived from the large Kaip'ing coal-fields in the north-east, operated by a Sino-British corporation.

For her present requirements, therefore, China is fairly amply provided with coal from her own fields. Her reserves have been variously estimated. Perhaps the safest estimate to accept is that which makes the amount to be of the order of 250,000 million tons. This is thirty times

¹ *Economic Handbook of the Pacific, 1934.*

as much as the estimated reserves for Japan and Korea. Compared with the estimated reserves of Canada and the United States, it is one-third of the former and one-sixteenth of the latter.

The petroleum surveys of China have shown, up to the present, an absence of any considerable workable deposits in accessible areas. According to the chief geologist of a large American oil company, China's petroleum resources 'are probably less than 1 per cent. of those of the United States'.¹ Hydro-electric developments of any great magnitude lie too far in the future to be taken into account in considering industrial developments within the next few years. Immense schemes for harnessing the power of the Yangtze have lately been propounded by the Chinese Government, but the difficulty attending the financing of such an enterprise places it beyond the limits of practicability for a long time to come.

Of the principal metals required for industry China possesses a fair share. Annual production of iron ore (Manchuria being excepted) amounts to about $1\frac{1}{2}$ to 2 million (long) tons.² Comparing this with the output of neighbouring territories, Japan's output (Korea included) is under one million tons and Manchuria's about three-quarters of a million a year. Over a third of China's annual output is exported, principally to Japan. While China's iron-ore production thus compares well with her neighbours, it must, to be seen in its true proportions, be related to world production of which it amounts to not more than one per cent., or barely one-twentieth of the production of the U.S.A. The Manchurian production of iron ore, it may be added, is now equal to about 75 per cent of the Chinese.

Reserves (Manchuria being omitted) have been estimated by the Geological Survey of China in 1932 at about 250 million tons of which nearly 100 million tons are

¹ See the *Annals of the American Academy of Political and Social Science*, Nov. 1930.

² For recent figures see *Monthly Bulletin on Economic China* for Sept. 1934.

situated in Chahar province on the border of Manchukuo. Mr. H. F. Bain, a leading authority on Chinese mineral resources, comments upon these figures:

'Her [China's] iron-ore resources must be termed very modest, or even very scant, when her potentialities of industrial development are taken into consideration. By way of illustration it may be pointed out that the total quantity of iron ore, both actual and potential, would be consumed by the iron industry of the U.S.A. within less than nine years.'¹

China's production of raw iron is at present extremely small, her output of pig-iron being less than half a million tons a year and well under 1 per cent. of world output. With the opening up at Hankow of large ironworks built with Japanese capital soon after the Great War, the production of iron appeared to be on the point of a great development. The works, however, became almost in-operative and the output of Chinese iron in China, now practically restricted to 'native' as opposed to 'modern' methods, returned to a low level, actually declining by some 30 per cent. between 1920 and 1928. Steel production is negligible, the only plants being the Yangtze Engineering Works, the Hankow and Yangchuen Smelting Works, and two or three small Bessemer furnaces. Meanwhile the present Government of China is apparently making determined efforts to build up a steel and iron industry and negotiations for this purpose with foreign interests have been on hand within the last few years.

Of other metals China contributes a substantial proportion of the world production of tin, antimony, tungsten, and manganese. For industrial purposes, however, the tin produced by the mines of Yunnan is of little account to China as the mines are divorced geographically from her manufacturing centres, the tin being shipped abroad by way of French Indo-China.

Passing to agricultural products, the most important, of course, is cotton. Of the quality of Chinese cotton the British Cotton Mission to the Far East in 1931 wrote that it possesses many desirable characteristics, that, though

¹ *The Ores and Industries of the Far East*, p. 84.

the staple is mostly very short, the fibre is hard, strong, and beautifully white, that it is well ginned but habitually adulterated with sand and water. The Mission considered that with only a slight improvement in length Chinese cotton would be readily saleable in Lancashire; the bulk is at present, however, suitable only for counts below 16 so that for higher counts a proportion of Indian or American cotton is needed.

With an output in an average year of something over one thousand million pounds, China provides between 5 and 10 per cent. of the world production of cotton. Her native crop, distributed over eleven of the eighteen provinces, though mainly grouped in the Yangtze and Yellow River basins, supplies about 75 per cent. of Chinese domestic requirements, the balance being imported, 20 per cent. from India and the remainder from the U.S.A. and Egypt. Simultaneously with this import, there is an export of Chinese short-staple cotton, principally to Japan, which accounts for 1.7 per cent. of world exports.¹ Expert opinion inclines to the view that China is capable of supplying her present requirements of raw cotton in full besides greatly raising the quality by easily feasible improvements in methods of cultivation, especially in the selection of seed. It is held that Government action in the field of education and research can go far to produce this result, and experiments in this direction have occupied closely the attention of the National Economic Council.

The north-western pasture lands bordering on Mongolia yield large quantities of wool, most of which goes to Tientsin for export abroad. It is impossible to furnish any reliable estimate of annual production, but the export trade in sheep's wool amounted in 1933 to 26 million lb., valued at \$11½ million. If an estimate, based on a census of the total number of sheep, and placing production at 35 million lb., is anything like correct, the Chinese output is about 5 per cent. of the Australian output, in which case it is clear that China's domestic supplies of wool could support a very considerable development of the wool-weaving

¹ S. M. Djang, *China as a Producer of Raw Materials*, &c.

industry which, under Government auspices, has lately made a start.

(c) *Chinese and Foreign-owned Factories.*

We now pass to the features of industry in China which were reserved to the last as involving the making of a distinction between the Chinese and foreign-owned classes of factories. The mention of the latter raises first the question of foreign investment in China and it may be well to interpolate here a few facts concerning this.

The explanation of the large foreign element in China's modern industrial development lies in the opportunity afforded of uniting foreign enterprise, experience, and efficiency with abnormally cheap labour in conditions which assure to the entrepreneurs the special advantages attached to the Treaty Port system, including, hitherto, low rates of taxation. The treaty ports, and Shanghai in particular, are favoured as industrial centres by geographical position, by the inflow of Chinese population and wealth seeking security and the other advantages of a stable, progressive government, and by the presence of foreign merchant communities who have created trading facilities in banking, shipping, insurance, &c. In more or less recent years a further inducement to found foreign factories in China has come from the rise in import duties and the consequent advantage of 'getting inside the tariff wall'.

Recent research into foreign investment in China carried out under the auspices of the Institute of Pacific Relations by Dr. C. F. Remer, Professor of Economics at the University of Michigan¹ (who emphasizes, however, that his figures are far from final), reveals the approximate size of foreign investment in China and of industrial development in particular.

The estimates may be stated as follows:

	<i>U.S. dollars</i> (at 1932 parity)
(a) Total foreign investment in China	3,242 million
(b) Total foreign business in China	2,531 „ (being 78% of (a))
(c) Total foreign manufacturing in China	376 „ (being 15% of (b))

¹ See *Foreign Investment in China*, by C. F. Remer.

The ratio of (c) to (b), it may be added, nearly doubled in the period from 1914 to 1931.

These figures comprise all foreign nations and the whole of China as it was in 1931. Limiting ourselves to the China of to-day, i.e. without the inclusion of Manchuria, and taking the three leading investing nations only (the share of the rest being insignificant) we find the figure of U.S. \$376 million given above under (c) reduced to U.S. \$318 million. The latter sum is composed as follows:

U.S. dollars

Great Britain . . .	173 million (54 % of total)
Japan . . .	125 „ (40 % of total)
U.S.A. . . .	20 „ (6 % of total)

The British investment is of a general character, including especially cotton mills and tobacco; the Japanese is in textiles to the extent of over 90 per cent; the American investment is mainly in carpet manufacture.

Foreign manufacturing enterprise in China is concentrated to a major extent in the cotton textile industry, where Japan's investment alone is reckoned to be nearly double China's investment in her own mills. In dealing with foreign factories we shall confine ourselves to the cotton mills, which for the most part are located in Shanghai, though Tientsin and Tsingtao contain also a number of foreign mills.

The number and size of cotton mills, divided according to ownership, can be seen from the following table based on figures published in the *Chinese Economic Journal* for December 1933, from particulars supplied by the Chinese Cotton Mill-Owners' Association, and approximating to the figures from a Japanese source quoted in the previous section (p. 188):

	<i>Chinese</i>	<i>Japanese</i>	<i>British</i>	<i>Total</i>
No. of mills . . .	89	41	3 ¹	133
No. of spindles (thousands) . . .	2,600 (57 %)	1,800 (39 %)	180 (4%)	4,580
No. of looms . . .	19,000 (48 %)	17,000 (44 %)	3,000 (8 %)	39,000
No. of workers . . .	180,000 (74 %)	64,000 (21 %)	13,000 (5 %)	257,000

¹ One additional British cotton mill has been erected in Shanghai,

Of the 133 mills shown in the 'total' column of the table given above, about 80 are engaged solely in spinning, two are for weaving only, the remainder combine both operations.

Figures derived from the same source show the relative output of the three classes of mills in 1933:

	<i>Chinese</i>	<i>Japanese</i>	<i>British</i>	<i>Total</i>
Yarn (in thousands of bales)	1,665 (72 %)	575 (24 %)	9 (5 %)	2,332
Cloth (in thousands of yds.)	9,548 (47 %)	8,723 (43 %)	1,850 (10 %)	20,121

It should be noted that the foreign mills produce, generally speaking, finer yarns than the Chinese¹ and that a much larger proportion of their output is earmarked for export.

Estimates of the capitalization of the different categories of mills are so varied in the methods of calculation and contradictory in the results that not even approximate figures can be given with any assurance of accuracy. A statement compiled from data furnished by the Chinese Cotton Mill-Owners' Association and quoted by the British Commercial Counsellor at Shanghai² gives the following rough totals of capitalization when converted into the common denomination of Chinese dollars:

Chinese mills	. . .	\$192,000,000
Japanese mills	. . .	\$300,000,000

For the British mills we may take the figure of \$8,250,000 given as the amount of the paid-up capital in the balance

by the Calico Printers' Association, to be worked in connexion with calico printing works established by them some years ago.

¹ The following figures are given in the *Chinese Economic Journal* for December 1933:

<i>Counts</i>	<i>Chinese mills</i>	<i>Japanese mills</i>
Below 19	56 %	15 %
" 20	27 %	48 %
" 21	17 %	37 %

² See *Trade and Economic Conditions in China 1931-33*, No. 561, published by H.M. Stationary Office.

sheet of the Ewo Cotton Mills Company which owns the British mills in Shanghai. In view of the difficulty of obtaining parallel data for the different national groups these figures must be treated, however, with a large degree of caution.

The financing of the foreign industrial enterprises established in China is partly provided by means of the local foreign banks. The latter include a number of banks especially constituted for Far Eastern business (of which the Hong Kong and Shanghai Banking Corporation is the largest, with balance sheet reserves amounting to the equivalent of £7,000,000), as well as major branches of leading banks in Japan, U.S.A., and other countries. Though primarily concerned with exchange business and the handling of foreign bills of exchange, these banks employ a proportion of their great local resources in industrial enterprise. Co-operation between them and the leading Chinese banks is a possible development of the future in which case their financial support may, under favourable political conditions, become available for the industrial development of Sino-foreign, or even purely Chinese, undertakings. In the meantime the position of foreign enterprises in China in respect to financial facilities is obviously much more favourable than that of the Chinese.

A major distinction exists between Chinese and foreign-owned mills in the spheres of organization and management. The Chinese mills—to take their case first—are mostly in private ownership or in the hands of small companies,¹ and although these companies have formed the combination known as the Chinese Cotton Mill-Owners' Association, the latter is little more than a body for the collection of information of interest to the trade and is only a slight check on the individualism of the separate mills. The technique of company finance is but little developed and Chinese companies are apt to retain

¹ Mr. D. K. Lieu in his *Preliminary Report on Chinese Industry* analyses 95 Chinese cotton factories as follows: Single Proprietorships 32, Partnerships 31, Limited Liability Companies 24, others 8.

the old traditions of family interest and nepotism. The same heritage of tradition shows itself in the handling of their finances, which are greatly weakened by unsound methods such as the custom of dividing up profits as soon as they are earned, leaving no reserves for unprofitable days, and of making no provision for depreciation except when dividends have been paid.¹

Compared with the foreign mills, the Chinese are less highly powered and the machinery, if not inferior in quality, is at least less efficiently handled.² Management suffers from certain inherited traditions of Chinese social life and is, perhaps, the weakest part of the structure. Chinese supervisors are said to lack authority over the workers, whom they are often slow to reprimand for fear of personal reprisals, and one Chinese writer, describing the position as a whole, goes so far as to say that 'the whole system of management among Chinese mill-owners is usually polluted by ignorance, favouritism, and squeeze'.

The foreign mills are in all these respects on a markedly better footing. The Japanese mills mostly belong to powerful combines with manufacturing interests in Japan to which they act as 'feeders'. 'Practically the whole of the Japanese interest in the industry in China is', writes Mr. Remer, 'a branch of that industry in Japan and accurately reflects the condition of the industry in Japan. The Naigai Wata Kaisha, the Japan and Shanghai Spinning and Weaving Company, the Dai Nippon Spinning Company, and the Toyo Company are all large concerns having mills in both Japan and China. The industry is an example of a development in Japan in which the Japanese have shown themselves effective, which has, one may say, overflowed to China.' For buying raw cotton and selling their finished products the Japanese mills have again trading arrangements with co-operative organizations in

¹ It is largely to this cause that the difficulties of Chinese mills since the depression have been attributed. In 1934 the Government had to step in and public bonds were floated for \$60 million to save a combine of nine cotton and flour mills from bankruptcy (see *North China Herald* of July 25, 1934).

² See King and Lieu, *op. cit.*

Japan. Seventy per cent. of their export passes through the hands of import houses in Japan or goes direct to the wholesale dealers.¹ The British mills, few in number, but with a proportionately large output, especially of cloth as shown by the foregoing table,² are under the single control of the Ewo Cotton Mills Company, organized by one of the strongest and oldest established British firms in China, Messrs. Jardine, Matheson & Co. The financial needs of the foreign firms are, as already indicated, satisfied by their compatriot banks at far easier rates than are available to the Chinese, they conserve their resources to a far greater extent, and they have the advantage of the services of trained and experienced managers.

In conditions of labour there are notable differences between the two classes of mills both as regards hours and output. The Chinese mills work as a rule two eleven-hour shifts, the Japanese two shifts of $8\frac{1}{2}$ to 10 hours. In spite of the longer working hours, average output per worker and per spindle is lowest in the Chinese mills as can be deduced from the tables on p. 207. According to Dr. H. D. Fong³ the spindle output is 15 per cent. better in the Japanese mills both in spinning and weaving, while the individual worker's output is 21 per cent. higher, the difference being mainly due to better machinery and organization. Although on the average a Japanese mill employs fewer workers, it contains 20 per cent. more spindles and nearly twice the number of looms, owing to the better ratio of workers to spindles and looms.

Finally, the Chinese mills stand at a disadvantage in the matter of taxes and pecuniary levies of all sorts. Those in the interior are further exposed to the risks of military interference and political disturbance in general. The inland mills have, however, a certain compensatory advantage in being closer to native supplies of raw cotton and also to their customers, the latter being, in their case, largely the hand-loom workers scattered over the country; up-country labour is cheaper and reputed to

¹ Arno Pearse, *op. cit.*

² See p. 224 above.

³ In the *Chinese Social and Political Sciences Review*, Oct. 1932.

be more amenable to discipline than that in the treaty ports.

From the many unfavourable parallels between Chinese and foreign-owned cotton enterprises in China and from the very serious depression into which the latter have recently fallen, some Chinese observers have drawn most pessimistic deductions. As an example may be quoted the following opinion expressed by Mr. Leonard Wu, a Research Associate in Social Sciences of the Academia Sinica, in the *Far Eastern Survey*:

‘Whether the Chinese mills will be able to survive the present acute crisis is problematical. When, in addition, the superior and more favourable position of the Japanese mills is taken into consideration, the outlook becomes even darker. Mr. Yung Tsung-ching predicted recently the eventual extinction of the Chinese cotton industry. This will happen soon, he said, when the suspended cotton mills are unable to procure more capital from the Chinese public to enable them to resume operations, and when the few surviving mills, in the face of severe Japanese competition, are compelled to admit defeat and close their doors.’

If such a view is well-founded, recovery can only depend on a speedy improvement of the whole economic situation in China leading to such an increase of purchasing power among the peasant population as will provide a market for the output of all mills. The peculiar powers of resistance to hard times and of resuscitation which have already been remarked upon as a Chinese characteristic may, however, save a situation which in other conditions might appear hopeless, and such gloomy predictions as those which have just been quoted are probably premature.

§ 3. CHINA'S INDUSTRIAL FUTURE

The forecast of future industrial development, difficult enough in the case of Western countries, still more so in the case of Japan and India, is supremely so in the case of China. This is both because China's industrialization is still in the formative stage and because her economic progress as a whole depends to a more than usual extent on political developments.

We have seen already that China with her abundant and potentially efficient labour, her supplies of certain raw materials, her fund of commercial enterprise, and her geographical advantages, added to the enormous possibilities of her domestic market, offers in a number of respects a favourable soil for the growth of modern industry. At the same time China is feeling—though less consciously than Japan—the urge of the problem of population, implying the means of paying for imported foodstuffs.¹ She is hindered at present in her natural role of an exporter of raw commodities by the drop in world demand, by exchange complications, and by her own transport and other internal problems; she is thus thrown back on the necessity of reducing by means of home production her imports of manufactures and/or developing factory exports in order to balance her trade.

This impulse towards industrialism has resulted in much theoretical planning and an increased 'industrial-mindedness' among the more enterprising of the Chinese. Actual progress has been retarded, however, by the effects of world depression and by the disturbances caused first by the fall and then by the rise in the value of silver,² and the Chinese-owned factories have during the last three years suffered a definite setback following upon their comparatively rapid advance. These particular retarding factors are, however, of a presumably temporary nature and assuming that the companies survive their present difficulties an improvement of world conditions, combined with a reasonably stable exchange, should open the way for a resumption of industrial growth. But besides these temporary international factors, are there possibly others of a deeper and more permanent nature tending to hold back China's industrialization? In order to answer this

¹ It must be noted that the need to import foodstuffs arises as much from internal transport difficulties preventing distribution as from actual shortage of production in China itself; also that there is a much greater scope than in Japan for increasing yield per acre by using more scientific methods.

² For the effects of the rise in the price of silver on China's economic situation reference may be made to section 1 of Sir A. Salter's report to the Chinese Government in his capacity of Economic Adviser.

question let us see what deductions can be made from the preceding sections of this chapter.

Of the prime factor of peace and order, one can only repeat that the trend in China is favourable, but that improvement will have to proceed faster than hitherto to produce the degree of order and stability on which to found a large-scale development of industry. Linked with political are 'cultural' factors. China has, as we have seen, a heritage of national characteristics some of which—such as nepotism, 'face-saving', and the system of commission commonly known as 'squeeze'—are incompatible with efficiency and constitute serious handicaps in organization, management, and finance. Their eradication depends, if not on a change of mentality, at least on a breaking away from tradition and on the substitution of 'Western' ideas and practices. This leads us to the question of Sino-foreign co-operation and the importation of a Western element into Chinese industrial enterprises as the only means by which the process can be quickened.

There is a widespread tendency to regard investment partnership in industry between Chinese and foreigners as the most promising line of advance for the development of China. The Salter report dealing with economic reconstruction in China advocates that foreign investment should be applied first to the rehabilitation of the railways and then to private enterprise in association with Chinese capital.

'The best basis [it continues] from both the foreign and the internal point of view will probably prove in future to be the association on equal terms (but not necessarily in equal proportions) of foreign and domestic investment. More and more it is probable that the foreigner will come to regard his best security as consisting in a close association with Chinese investors, whose fortunes are linked with his and who will bear the controlling share of responsibility, and in the credit of the persons undertaking the enterprise and its intrinsic prospects.'¹

It must be recognized, however, that there are many difficulties to be surmounted before partnership schemes

¹ Salter report, already cited., p. 46.

on these lines between Chinese and foreign interests can be widely entertained. Past experiments have not been very encouraging if we except the case of the Anglo-Chinese Kailan Mining Administration. The doubtful attitude of the Chinese Government, which, as already mentioned, has lately promulgated laws excluding enterprises in which foreigners have a share from the subsidization extended to home industries, combined with the general uncertainty in Chinese political affairs, both domestic and international, represent obvious risks, while differences in legal concepts and practice and the lack among Chinese financiers and industrialists of men trained to take the 'long-term' view of business are serious practical hindrances. For public borrowing of funds much would in any case need to be done in instructing the ordinary investor and correcting the general ignorance which prevails abroad regarding all that concerns China. In the meantime a step has been made in the direction of co-operation by the formation in June 1934 in China of the 'China Development Finance Corporation' with a capital of ten million dollars (Chinese) for bringing together Chinese and foreign capital to promote industrial development.

To return to China herself, rapid industrial expansion implies the possession of the necessary physical equipment. In this China is definitely deficient. The amount of modern factory plant in the country is insignificant if we exclude cotton-mill machinery and the electrical power installations lately erected in some of the principal towns. The cotton-mill machinery itself—in the Chinese-owned mills that is—is markedly inferior to what is found in Japan where war profits were generously applied to the renovation and modernization of plant. At the present time China's imports of machinery (valued at \$42 million in 1933) represent only 3·2 of her total imports. Textile machinery alone (of which approximately one-half comes from Great Britain) accounts for one-fifth of the whole, being valued in 1933 at \$8·7 million.

The increase in imports of machinery to the extent necessary for large-scale industrial expansion would require

loans or trade credits from abroad. The difficulties in regard to this, though serious, are by no means insurmountable, and while they would probably preclude any very rapid expansion, they would largely disappear with any steady political improvement. If this were to take place strong pressure would arise to sell to China a class of goods representing, as the Salter report stresses, 'the most distinctive products of the more advanced industrial countries' the sale of which, it may be added, would offer concrete compensation for losses occasioned by competition in the lighter industries.

The question of markets for Chinese manufactures has, for lack of space, not been touched upon hitherto but cannot be omitted in discussing future prospects. At the present time China's principal customers in order of importance are Japan, the U.S.A., and Great Britain. Taking manufactured goods only, the Japanese market far transcends all others in importance, this being largely due to the complementary trade in cotton textiles, China furnishing yarn to Japan to be woven in Japanese mills and, in part, exported back to China. India, Malaya, and the Netherlands East Indies are consumers of Chinese cotton piece-goods. Developing industries would, no doubt, find their principal export markets for some time to come in the Eastern hemisphere and competition with the products of Western industry would be chiefly confined to that area. The big market for expanding Chinese industries is, however, obviously China herself. It is upon this market that, as is emphasized in Sir Arthur Salter's report, Chinese industry must mainly base itself. The capacity of this home market¹ consists, as the report points out, of the agricultural population's margin of production over domestic consumption; 'the increase of the production of the average agriculturists remains the fundamental problem of China's economy'. The margin at present shows little sign of increasing; in fact it would appear actually to have

¹ The 'home market' no longer, of course, includes the three Manchurian provinces, which formerly consumed one-third of China's factory-produced cotton yarn.

dwindled in recent years. A very great change is bound to result, however, if China has peace, and if world prices for agricultural products recover. This would do much to restore the position of the peasant, and it is the peasant's purchasing power which is probably the greatest factor of all in determining the future rate of development of Chinese industry.

With regard to the question as to which branches of industry are most susceptible of development we cannot do better than refer again to Sir Arthur Salter's report where he sets out the principles which should, and may be expected to, inspire industrial policy. These are as follows: (i) the encouragement and extension of industries which can find a sufficient home market, (ii) the limitation of 'export' duties to those in which China has special advantages, (iii) preference for industries requiring a relatively small capital investment, (iv) the initial building of industries upon China's agricultural production and mineral resources. This would result, the author of the report believes, in the development first, of the industries associated with cotton, next, of those associated with silk, finally, and 'most important of all if we group them together', of 'small specialized light industries operating economically in small units, requiring skilled work but not very elaborate or expensive plant'. Later would follow the mineral 'extractive' industries and the industrial processes based upon them, including the production of fertilizers. Most of the heavy industries, the report concludes, 'must probably be considered unsuited for China at her present stage of development'.

So far in this section we have been considering native industrial development from the Chinese standpoint. But this does not exhaust the possibilities of expansion. There remains the question of the factories under foreign ownership and control. These form a separate problem standing as they do to a great extent outside the Chinese economy; it is even arguable that in some cases they belong more to the economy of the foreign country whence they derive than to that of China. Even as regards the marketing

of their products they are—though this applies to the cotton mills more especially—independent of conditions in the interior of China to the extent that they cater for export.

Already the foreign mills contribute some 50 per cent. of the cotton goods exported from China. The Japanese cotton companies are at present in a process of expansion¹ and in view of Japan's geographical and cultural advantages for conducting manufacture in China it may reasonably be assumed that future development of foreign factories in China will be predominantly Japanese. What are the chances of such development? The answer must be sought first in the attitude of the Chinese themselves and of the Japanese Government. The time is passing, or has passed, when foreign industrial enterprises could be successfully conducted in China without regard to China's national policy. Although the foreign factory is still protected by treaty rights and privileges, its future existence and prosperity depend largely on the acquiescence of the Chinese authorities in foreign enterprise. Even if its immunity from direct taxation is assured, the foreign factory can be handicapped out of existence by discriminatory measures such as those referred to on pp. 202-3, 231. The Chinese Government's attitude is at present ambiguous and difficult to predict. There exists a natural reaction against foreign enterprises which are exempt from national control and, as a class, compete with native factories. On the other hand they provide much needed employment and may, in the course of time, become subject to Chinese taxation and so contribute to the national exchequer.² While these considerations will certainly influence decisions,

¹ They were reported at the end of 1933 to be planning the erection of seven new mills in Shanghai and Tientsin (see *Chinese Economic Journal* for Dec. 1933).

² A movement in this direction has been apparent during recent years in the voluntary submission of some of the foreign companies to Chinese administrative measures and in the lessening insistence by foreign governments on a number of treaty rights. The Chinese authorities have claimed to apply the Business Tax to foreigners but this claim has hitherto met with resistance.

the broad question of toleration, or otherwise, of foreign-owned factories is bound eventually to turn on the Government's foreign policy as a whole, and particularly on its relations with Japan. If these are conciliatory towards Japanese interests the position of Japanese factories in China will, of course, be assured. If, on the contrary, effective resistance develops to 'economic penetration' by foreign countries as a whole, or by Japan in particular, further development will be baulked.

To turn to the Japanese side, it has been pointed out already that the Japanese spinning mills fill the role of feeders to the weaving industry in Japan and help to lower its costs. To this extent they can be ranked by Japan as a national asset. Integration of interests is only possible, however, for so long as the overseas factories can be restricted to lines of production ancillary to the industries at home. As the former grow in number and increase in importance, they must inevitably develop greater independence and become more difficult to keep as mere appendages to the home industry of Japan. From being helpers they will tend to become competitors. The process has already begun in the case of the weaving mills. When this happens, it will become a choice of policy for Japan whether or not to continue to encourage the expansion of overseas factories competing with home factories, especially in the important Chinese market. In other words, we shall see repeated the situation which occurs when colonial enterprise reaches the point of affecting vested interests in the mother-country. It would seem not impossible, however, that Japan, with her marked capacity for co-ordinating business and national policy, might solve the dilemma and find methods of exploiting the advantages of a system which unites Japanese capital and management with Chinese labour without thereby doing damage to national interests regarded as a whole. The nature of such an arrangement can only be conjectural, but it may be assumed that it would broadly follow the lines of using the factories in China for supplying China with relatively low-grade manufactures and allowing the export industries in Japan

to specialize in higher classes of goods more adapted to wealthier overseas markets.

Should Japan decide that her interests lie in expanding her industrial ventures in China and should, at the same time, the increase of Japanese factories be opposed by the Chinese, the outcome would obviously depend on Japan's success in conciliating Chinese sentiment or on her power of asserting her own will. To pursue this question would lead us too deeply into the field of political speculation, but it is necessary to emphasize here the peculiar position of Japan in regard to dependence upon Chinese goodwill, which obviously places her on a somewhat different footing from that of the Western nations engaged in industry in China. In the first place, as compared with the latter, the Japanese are undoubtedly better able to accommodate their outlook and methods of procedure to those of the Chinese. In the important matter of extraterritorial rights, for instance, it has been frequently pointed out that the abolition of these would mean less to the Japanese than to other foreigners in China, the Japanese being certainly able to adapt themselves to a Chinese régime with greater ease and likelihood of success. Whether, as sometimes suggested, the Japanese Government might feel it worth while to barter the surrender of extraterritorial rights for the sake of obtaining economic privileges in China is a question pertinent to our study but again too conjectural for more than a passing mention. Secondly, proof has been given of Japan's readiness to assert her claims against China by means of 'positive' action. She demands at the same time a 'special position' in regard to Chinese affairs.¹ In so far as this implies a determination

¹ See the statement issued in April 1934 by the spokesman of the Japanese Foreign Office following on the Japanese notice of withdrawal from the League of Nations. The statement begins: 'Owing to the special position of Japan in her relations with China, her views and attitude respecting matters that concern China may not agree in every point with those of foreign nations; but it must be realized that Japan is called upon to exert the utmost effort in carrying out her mission and in fulfilling her special responsibilities in East Asia.' It contains the further phrase: 'Although Japan's attitude towards China may at times differ from that of foreign

to enforce Japanese policy in economic relations with China, it has a significance which cannot be overlooked in attempting to weigh the prospects of the expansion of industrial enterprise in China under Japanese control. The most that can safely be said is that expansion in this direction on a really important scale appears to be a contingency which should by no means be precluded, but which depends in the first instance on the adoption by Japan of an economic policy not at present apparent.

We must now undertake the none too easy task of gathering up the contents of this section into a general conclusion. The conditions precedent to the industrialization of China may be summarized as follows. Of basic resources China is blessed with a fair share, possessing as she does an abundance of cheap labour, good or moderate supplies of the more essential raw materials, and an undoubted command of native enterprise and business aptitude. Of what may be termed 'the will to industrialize' she gives evident proof, though her impulses may not follow the line of the urban concentration of industry typical of the West. As regards the more immediate prerequisites of industrialization—finance, transport, and orderly administration—her possession of these is more potential than actual; her financial resources need supplementation from abroad, her transport system requires improvements and extension, and her Government stabilization over a greater area.

With these conditions in the background we may, at the risk of over-simplifying an essentially complex situation, condense the possibilities of industrial expansion into three specific alternatives. The three alternatives can be defined as follows: (a) The continuation of the 'hybrid' industrial organization, which we see existing to-day. This would only be possible if no radical changes took place in the general condition of China. It might be expected to result in a slow and steady expansion of factories, subject to the ups and downs of the economic situation as a whole.

countries such differences cannot be evaded owing to Japan's position and mission.'

It could not, for a number of years, make Chinese industry a really important factor in world competition. It would, on the other hand, increase China's self-sufficiency and help to rectify her adverse balance of trade. As far as cotton manufacture is concerned, the effect most keenly felt would be the killing of the Chinese hand-loom industry by the power looms. (b) A big 'artificial' development of foreign industrial enterprise in the treaty ports and under the Treaty Port system. Such a development would only be possible on the double assumption first, that China herself failed to present to the world a strong, unified central government capable of recovering full national sovereignty and secondly, that the foreign Powers, or a particular foreign Power, were desirous and determined to keep in force indefinitely the extraterritorial régime, if necessary by force. It would also be necessary that the Power concerned (we need hardly consider any other country than Japan) should regard the expansion of foreign-owned industry in China as compatible with the interests of the industries in the home country. The limits of such an expansion of foreign industrial enterprises on Chinese soil under the aegis of extraterritoriality are difficult to define, but it is perhaps not inconceivable that they might multiply to the extent of playing a very appreciable role in world industrial production. Although they would doubtless produce chiefly for Chinese consumption this might, in the case of Japan, mean the supply of the Chinese market by Japanese factories in China and a corresponding diversion of the output of factories in Japan to other external markets. (c) Thirdly, and lastly, industrial expansion in China might take place as part of a general development of the country, beginning with railway rehabilitation and construction, financed partly from abroad and involving a large degree of Sino-foreign co-operative effort not only on the financial, but also on the technical and managerial, side. Necessary preliminaries to this are (1) a fair guarantee of peace and of law and order, (2) the raising of the level of Chinese credit specially in connexion with the railways, (3) mutual toleration among the foreign Powers interested in the Pacific

of the activities of the nationals of each in participating in Chinese development schemes, and (4) the liquidation of the extraterritorial problem and of Chinese opposition to special foreign rights. Such a general development on co-operative lines offers without doubt greater possibilities than either of the other alternatives. If feasible and successful, it would entail an economic regeneration of China and an incalculable increase of China's purchasing power for all classes of goods. Foreign assistance on the scale necessary for 'rehabilitation' of any substantial sort cannot at present be said to be visibly forthcoming, but there is a wide agreement of opinion that an improved record of Chinese administration (especially in regard to the management of the railways and of responsibility to existing foreign creditors) would, at the end of even a short period, open the way to a large inflow of capital which easily might be accompanied by a very important development of Sino-foreign enterprise.

CHAPTER IV

INDIA

§ I. BRIEF HISTORY OF INDIAN INDUSTRIALIZATION

BEFORE intimate contact was established between East and West, the economic situation was very similar in India, China, and Japan. In all three countries there were ancient races, civilizations, and cultures, with economic and social systems based on status and custom. There were old-established industries, organized on traditional lines, which had been in the industrial vanguard but were left behind with the onset of the industrial revolution in the West. In the East there was but little idea of development or progress and the 'economic motive' had comparatively little strength.

A distinction, however, between India and the Far East soon manifested itself, in that China and Japan had, as compared with India, a much greater dislike of, and contempt for, the 'Western barbarians', and succeeded in keeping them out much longer. Direct contact between India and the West started earlier partly because of India's greater geographical accessibility, and partly because certain Indian rulers showed a readiness to trade and make treaties with Europeans. Once the latter had obtained a footing in India, the lack of political unity and the conditions of chaos and disorder which followed the break-up of the Mogul Empire made penetration easy. Nevertheless contact was long confined to commercial relationships and in the main to a few coastal settlements, owing largely to the monopolistic policy enforced by the English East India Company. Not until firstly (partly in 1813 and partly in 1823) the trade monopoly, and secondly (in 1833) the trading powers of the company were removed, did it become possible for any considerable number of private individuals, merchants, planters, &c., to settle in India.

At the beginning of the nineteenth century India's industries still consisted, as for many centuries previously,

of village handicrafts serving purely local needs, and of urban (often artistic) industries serving wider, and to some extent foreign, markets. The most important of the latter were the textile, mineral, and metal industries. The urban industries were organized in guilds, or by middlemen who made advances to the craftsmen and marketed the goods, many of which were of high quality and value, although output and exports were small in quantity by modern standards. The industry in fine woven cottons had enjoyed a market on the African coast, in the islands of the East Indies, and in England itself, but during the eighteenth century the trade with the latter country became steadily reduced by prohibitions on certain goods and the growth of protective duties. By the end of the century the cotton industry had already lost its former European markets, but as yet retained its home and Far Eastern markets.

Throughout the nineteenth century competition from the growing machine industries of the West increased, and the indigenous Indian industries experienced continuous depression. Eventually the Indian cotton industry in competition with Lancashire lost the greater part of its remaining foreign markets for piece-goods, and a substantial part of the home market for both yarns and piece-goods. By the end of the century the hand-spinning of cotton in India had very greatly diminished. The metal and mineral industries were also hard hit. Iron smelting, previously carried on in small works scattered throughout the country, and the associated production of steel goods (mostly for arms and ornament) practically disappeared, whilst the quality of the products of the artistic handicrafts deteriorated. British factory products were not only cheaper than indigenous goods, but also became fashionable among the richer classes. This process, that is the decay of peasant industries, has not, of course, been peculiar to India, but has occurred in all areas affected by the Industrial Revolution.

The extension of British rule in India and the economic policy of the Government aggravated these tendencies.

Attempts to assist or protect the decaying indigenous industries hardly existed except on the artistic side. In the earlier days British control in India was still far too incomplete to make practical any general measures of protection for Indian industries, and administrative energy was monopolized by the need of establishing law and order, while at the same time the British authorities in India were under the influence of the *laissez-faire* creed which was taking hold in England.

When later the need for the encouragement of industry became more apparent, being emphasized in the first Famine Commission's report made in the 'eighties, the Government was slow to awake to its responsibilities in the matter. The result was that the production and export of the classes of goods demanded in the West, such as food-stuffs, raw materials, and plantation products, increased at the expense of the replacement of indigenous by imported manufactures.

The most important factor accelerating these changes was the improvement in transport and communications which took place during the second half of the century. The construction of railways in India (the first line was opened in 1853, and the main network completed by 1900), the improvements in ocean transport, and the opening of the Suez Canal tended to unify the whole country, and to open up the interior, thus enabling both easier penetration of the Indian market by English goods and the large-scale production and export of foodstuffs and raw materials. Another effect was to equalize prices, bringing Indian into line with world-prices. Incidentally railways revolutionized the famine problem.¹

By the end of the nineteenth century India had become a great exporter of rice, wheat, cotton, jute, tea, oilseeds, &c., and dependent upon imports of manufactures, especially cotton clothing, iron and steel goods, railway plant, and machinery. In the industrial sphere some pro-

¹ Food could now be transported quickly to the afflicted areas, and the problem was transformed from one of life and death to one of the provision of work and relief.

gress had been made, but in limited directions only. Even before the railway era, attempts had been made to establish modern industries (such as cotton mills and ironworks) in India, but these had failed, mainly owing to the absence of adequate transport facilities. The construction of railways removed the worst difficulties. The first successful cotton spinning mill was established in 1853 at Broach (Bombay Presidency); the coal-fields of Bengal and Bihar began to be worked in connexion with the East Indian Railway; jute spinning and weaving mills were established in Calcutta (from 1855 and 1859 respectively); engineering works were set up at railway junctions; and modern ironworks, utilizing coal for smelting, were established at Barakar (Bengal) in 1875. But progress was slow, and, except in the cotton mill industry, both capital and enterprise were mainly supplied from England. The railway net was not yet complete; the infant industries were subject to the competition of untaxed imports; capital, managerial ability, technicians and skilled labour were scarce, or expensive, if imported; manual labour had to be recruited and trained. (The situation may be summed up by saying that, although Europeans had been permitted to settle and work in India, they had confined themselves mainly to foreign trade, plantation production, and one or two other types of enterprise, the Government pursued a *laissez-faire* policy, and Indian leaders inclined to stand aloof from economic Westernization, and showed unwillingness to submit themselves to the manual training and the drudgery necessary for effective acquaintance with technical processes. At the same time the Government of India did not, like that of Japan, follow a policy of sending students abroad for technical education.)

The contrast with Japan is striking. Although contact with the West and the economic transition only began in that country with the Restoration of 1868, once a start had been made little more than half a century was needed to enable Japan to catch up with the West in the industrial sphere. In Japan the whole energy and resources of the Government and of the former feudal aristocracy lay

behind industrialization; in India the Government left industry severely alone, and for long no Indian industrial leaders appeared. Japan deliberately discarded feudalism and the old attitude towards economic matters; Indian sentiment remained in its old grooves. Japan chose, India merely tolerated Westernization. In Japan patriotism and loyalty to the Emperor reinforced economic developments, whilst the spread of education popularized the new ideals and methods; in India primary education was neglected, and the natural leaders were apt to look askance at materialistic ideals. In Japan State paternalism encouraged individual enterprise, and the strong family and paternal sentiment of the country extended to employers and the State; in India caste and the prevailing Hindu joint family system, whilst providing support for the weak and unsuccessful, hindered individual enterprise owing to the absence of the stimulus either of necessity or personal ambition.

Thus in Japan modern industries, under Japanese control, immediately replaced antiquated types of enterprise, whilst in India there was a definite hiatus between the decay of the indigenous industries and the rise of factories and large-scale concerns, the gap being filled by imports of manufactures. In Japan the Government established and encouraged railways and modern shipping, mining and manufacturing concerns, and various types of modern banks. In India the Government confined its economic activities to the sphere of public works, e.g. railways, irrigation, and famine relief works, although the great reforms in civil administration eventually had the effect of facilitating economic and commercial progress. Japan borrowed foreign capital, it is true, but she utilized it herself, whereas in India the majority of modern enterprises were financed, controlled, and managed by foreigners.

China for her part has, like India, been largely dependent upon foreign capital and enterprise for railway construction and the promotion of modern industries; but in her case, owing mainly to the lack of a strong central

government, progress has been much slower, and modern transport facilities are still confined to very limited areas.¹ Broadly speaking one may say that, from the point of view of industrialization, India holds a position half-way between China and Japan.

So far we have considered only nineteenth-century developments. The very factors which revolutionized Indian trade during that century, as regards both volume² and nature, bore within them the seeds of developments which in the following century reversed the nineteenth-century trend towards dependence upon exports of primary goods and imports of manufactures.

Towards the end of the century India suffered from a series of devastating famines and other calamities, whilst Government finances were at a low ebb owing to the general poverty and depression, the high cost of administration, and the decline in the gold value of the rupee. After 1900 things took a turn for the better. Harvests improved, the rupee had been stabilized, the price level rose, the railways began to pay, and taxation could be reduced. This marked the turn of the tide as regards the relative importance of manufactured and primary goods exported, the position and rate of development of industries in India, and the economic policy of the Government. On the one hand the modern, large-scale industries took firm root and began to expand rapidly, whilst at the same time the introduction of peace, order, and a considerable degree of unification called into being a strong nationalist spirit which resented and revolted against the alleged economic domination of India by England. Under this influence arose the 'Swadeshi' movement advocating industrializa-

¹ There are about 9,000 miles of railways in China, as compared with 42,000 in India.

² It is difficult to measure the increase in the volume of trade, but it may be noted that in 1835 (when the present series of trade statistics started) the total value of merchandise imported and exported amounted only to just over £14 millions, in 1850 to about £32 millions, while the average for the years 1899-1900 to 1903-4 amounted to no less than £139.7 millions. This compares with £332 millions in 1928-9, and £198.7 millions in 1932-3.

tion. The grant of increasingly representative parliamentary government, and the wider and clearer recognition of the deplorable condition of the masses, led on to a more constructive economic policy, designed both to stimulate and improve production and to satisfy the wishes of the articulate classes.

Thus contact with the West at last began to affect fundamentally not only civil administration and foreign trade, but also the development, organization, and methods of industrial production in India.

The period preceding the Great War was a period of general prosperity, industrial advance, and trade expansion. By 1913 the cotton, jute, coal, engineering, and plantation industries had become strong and progressive, while mill-made cotton yarn and piece-goods, and jute cloth and gunnies, came to rank among India's chief exports. In 1907 the famous Tata Iron and Steel Company was founded, producing pig-iron at once and steel seven years later. The Tata hydro-electric concerns were started, and began to supply electricity to Bombay mills in 1915, whilst the Burma oil-fields (whose development started in 1891) supplied the Indian Peninsula with a new source of illumination and power.

Then came the War itself, which hit Indian trade hard, but, as in the case also of China, gave a great, though in some cases temporary, stimulus to industry owing to the elimination of competing imports. The effect of the War on Indian trade forms a great contrast to its effect on Japanese trade. Whereas the latter increased over 200 per cent. in value during the War years, the value of Indian trade did not regain the level of 1913 until after the War was over, and the 1913 volume was only regained in 1927-8. Thereafter it rose slightly in 1928-9 and 1929-30, since when it has again fallen far below the pre-war level.

These movements of Indian trade from the War to the present time are shown summarily by the tables on p. 247.

The War revealed both the potentialities and deficiencies of Indian industries. The production of woollen,

cotton, metal, and a number of other manufactured goods was greatly stimulated by both the special war demand and the cutting-off of imports. The Government, too, encouraged industrial production by every means in its

I. *Total Value of India's Trade in Merchandise*

(In crores of rupees)¹

	1913-14	1928-29	1929-31	1932-33	1933-34
Imports . . .	183	253	240	132	115
Exports . . .	244	330	311	132	146
Total . . .	427	583	551	264	261
Net Imports of bullion and specie . . .	36	31	23	...	...
Net Exports of bullion and specie . . .	...	...	...	64.9	57.0

II. *Quantity (through revaluation) of India's Trade in Merchandise*²

(In crores of rupees)¹

Imports . . .	183	190	189	162	146
Exports . . .	244	260	263	176	209
Total . . .	427	450	452	338	355

power. But India could not take full advantage of her temporary monopoly, as she depended for plant, machinery, and accessories on imports from abroad. Japan and the United States stepped into the breach. The Japanese established themselves and their goods firmly in India and extended their shipping lines thither, thus preparing the way for the competition in the cotton piece-goods trade between Lancashire, Japan, and India which became a notable feature of the post-war period.

Before examining in more detail the present condition of Indian industry and trade it must be emphasized that,

¹ A crore means ten millions, and is written 1,00,00,000. One rupee is at the present time equivalent at par to 1s. 6d. sterling. The figures refer to private merchandise, and exclude re-exports.

² These figures measure changes in quantity approximately, being a revaluation of trade on the basis of prices in 1913-14.

in spite of all these developments, agriculture remains of preponderant importance in India, the numbers occupied in the indigenous industries still greatly exceeding those in organized industries.

According to the Census of 1931, 67·1 per cent. of the total occupied persons are engaged in agriculture, pasture, fishing, and hunting¹ whilst 10·0 per cent. are occupied in industries of all types. Of the latter number the majority are occupied in indigenous, small-scale industries, and it has been estimated that there were only about three and a half millions (less than 2·3 per cent. of all occupied persons) in organized industrial establishments. There were still in 1931 only one and a half millions employed in factories subject to the Factory Acts.

The numbers employed in the chief organized industries in 1921 and 1930 are given below:

	<i>Organized Industries</i>	
	<i>Numbers employed</i>	
	1921	1930
Cotton Spinning and Weaving mills	350,000	404,748
Jute mills	287,000	339,116
Collieries	181,000	169,800
Railway workshops	112,000	137,302
Metal and Engineering workshops (including iron foundries)	100,000	160,901
Cotton ginning and pressing	83,000	190,971

These six industries, and the tea plantations (which employ more than twice as many persons as the cotton spinning and weaving mills), are the only ones employing over 100,000 persons each. While the numbers employed have increased in all cases, except that of collieries, the cotton and jute industries remain of outstanding importance.

The cotton mill industry began to expand rapidly from the 'eighties, mills being erected principally in the Bombay Presidency but also in Madras and many other large centres of population. Despite the removal of all duties on cotton imports between 1882 and 1894, temporary

¹ Making allowance for certain changes in census methods the percentage occupied in agriculture has changed but little since 1921 and is almost the same as in 1911.

set-backs due to plague and drought at the end of the century, and the rise of Japanese competition in India's foreign markets early in the twentieth century,¹ India had by 1914 become the fourth greatest cotton manufacturing country in the world.² Loss in foreign markets was more than compensated by the expansion of the home market and this change in markets was accompanied by a relative increase in the production of finer yarns, and in weaving as compared with spinning.³ The products of the Indian mills wedged themselves between the imported (Lancashire) and the hand-made goods, obtaining a practical monopoly in the intermediate grades, the better quality mill goods competing with imports and the inferior types with hand-made products.

The following table illustrates developments in the cotton mill industry since 1900:

The Indian Cotton Mill Industry

	<i>Number of mills</i>	<i>Paid-up Cap- ital (lakhs of rupees)</i>	<i>Looms</i>	<i>Spindles</i>	<i>Numbers employed</i>
1900-1	191	15,80.1 ⁴	40,542	4,942,290	156,355
1913-14	264	18,60.6	96,688	6,620,576	260,847
1925-26	303	47,50.0	154,591	8,403,336	370,617
1930-1					
British India	261	35,08.5	153,481	7,866,436	357,965
Indian States	49	4,97.7	18,244	935,903	49,224
Total	310	40,06.2	171,725	8,802,339	407,189
1932	340	...	186,407	9,501,047	403,760

¹ As shown elsewhere in this volume, early in the twentieth century Japanese ousted Indian yarn from the Japanese market, and began to compete in the Chinese market also. Indian raw cotton was exported to Japan from 1889. The development of China's own cotton mill industry also affected Indian sales in China.

² The first three countries were Great Britain, U.S.A., and Germany.

³ Mill-spinning developed before mill-weaving in India, as in other countries (including Japan and China), because relatively little skill and experience is necessary for successful production, whereas cheap labour is of great competitive advantage. Mill-weaving has developed later in each important producing country as skill and experience have increased.

⁴ 'Capital employed'. 'Paid-up' capital is not given for this year.

During the War the industry experienced unparalleled prosperity, but only a few new mills were constructed on account of the difficulty of obtaining machinery and plant. Hence existing mills worked day and night and obtained high profits. The boom continued until the crisis of 1921, and in fact serious depression did not set in until about 1923. Since then the depression of prices and profits, at any rate in the Bombay Presidency, has been practically unrelieved notwithstanding the continual expansion, in the case of India as a whole, of production and sales in the home market and of the introduction and extension of protective tariffs. Exports of yarn and to a lesser extent of piece-goods (as well as imports of both yarn and piece-goods) have declined, the immense increase in output having been absorbed in the home market, but often at unremunerative prices. Thus the great feature of recent years in India has been the regaining of the home market, in great contrast to developments in Japan, where not only have imports been reduced to negligible proportions, but an immense export trade first in yarn and later in piece-goods has arisen, rendering the position of Japan—as an industrial country dependent upon imports of raw materials and exports of manufactures—comparable with that of England.

In concluding this section a short analysis will be given of India's position in world trade. In 1913 she came seventh on the list of trading countries, with 3·6 per cent. of the recorded world trade in merchandise, being surpassed by the United Kingdom, Germany, U.S.A., France, the Netherlands, and Belgium. At this time China came tenth and Japan eleventh on the list.

In 1929 India had risen to sixth place, but with only 3·0 per cent. of the world's trade. At this time the United States, United Kingdom, Germany, France, and Canada were the leading countries, Japan having risen to seventh place, and China being eleventh on the list. In 1933 India had fallen to tenth place, with only 2·67 per cent. of the world's trade, whereas Japan had risen to seventh place, and China remained eleventh. These latter figures illu-

strate clearly both the extraordinary severity of the depression in India, and the rapid relative improvement in Japan's position.

The following table shows the principal classes of India's imports and exports in the pre-war and War periods, and for the years since 1930-1:

Trade in Principal Articles of Merchandise (on private account)

In percentages based on values¹

IMPORTS.

	1909-14 (average)	1914-19 (average)	1930-1	1931-2	1932-3	1933-4 ²
Cotton manufactures . .	36	35	15	15	20	15
Iron and Steel . .	7	6	7	5	4	5
Machinery . .	4	4	9	9	8	11
Sugar . .	9	10	7	5	3	2
Hardware . .	2	2	2	2	2	3
Mineral Oil . .	3	3	6	7	5	5
Silk goods . .	3	2	1	2	2	2
Other articles . .	36	38	53	55	56	57

EXPORTS.

	1909-14 (average)	1914-19 (average)	1930-1	1931-2	1932-3	1933-4
Jute, raw and manufactured	19	25	20	21	24	22
Cotton, raw and manufactured	15	16	24	18	18	21
Food and Grains	21	17	14	13	12	8
Oilseeds . .	6	6	8	9	9	9
Tea . .	6	8	11	12	13	13
Hides and Skins	7	8	2	2	2	3
Other articles . .	26	20	21	25	22	24

¹ Department of Overseas Trade Report on Conditions and Prospects of United Kingdom Trade in India, 1933-4.

² Metals and ores, which account for 8.2 per cent. of total imports in 1933-4, are not included in this list.

On the import side this table, and still more the detailed figures, show that a large proportion of India's imports are manufactured goods, very miscellaneous in character, thus offering a tempting market for almost every industrial country. The trend of the import trade shows that high-quality miscellaneous manufactures are becoming of increasing importance. The heading 'other articles' forms a larger proportion of the total, and consists largely of manufactures, including motor-cars and lorries, instruments and apparatus, provisions and oilman's stores, dyes and chemicals. In 1933-4 vehicles (chiefly motor-cars and lorries) formed no less than 4.1 per cent. of India's total imports. On the other hand cotton and iron and steel goods have decreased in importance, owing mainly to increased home production, whilst, owing to the policy of protection, sugar imports have now (1935) been practically eliminated.

India's exports are also heterogeneous in character, and include foodstuffs, raw materials, and manufactures. In the year 1933-4 manufactured jute accounted for 15.2 per cent. of India's exports, but manufactured cotton for only 1.8 per cent. Metals and ores accounted for 3.7 per cent. of the total. Important manufactured articles not given separately in this list are pig-iron, leather goods, woollens, paraffin wax, oilcake, and shellac. The decline in the relative importance of foodgrains and of hides and skins is striking, and is counterbalanced mainly by the increased importance of jute-goods, raw cotton, oilseeds, and tea.

§ 2. PRESENT CONDITIONS

(a) *The Organization and Finance of Large-scale Industries and the Role of Foreign Capital.*

In order to estimate the competitive position and potentialities of Indian industries it is necessary to examine the main factors and problems affecting large-scale industrial production within the country, and to analyse the condition of the principal modern industries. These questions may be classed under four headings: the organization

and financing of industries in India; the industrial policy of the Government; the position of the cotton mill and iron and steel industries; and industrial labour.

In the first place the great part played by foreign capital and enterprise in the development of India's modern industries must be realized. British capital and enterprise have played a large role in promoting the jute, mining, engineering, plantation, paper, and cement industries.¹ There are of course Indian companies engaged in most of these industries, but European concerns prevail, and normally the Indian companies have a smaller capital and output. The outstanding exceptions have been the cotton mill industry, the Tata iron and steel, hydro-electric, and associated enterprises, and those sugar factories which have been established since 1930. The number of Indian enterprises which have sprung up in all spheres has moreover greatly increased since the beginning of this century.

A distinction must obviously be made between the raising of capital abroad and the ownership of such capital. For instance, although the jute industry is the outstanding example of an industry promoted, controlled, and financed by British companies, yet at present some 60 per cent. of the capital is Indian owned. On the other hand, even when the capital and control are predominantly Indian, the technical management may be largely in foreign hands, as was the case at first in the cotton and steel industries.

India's position with regard to foreign capital is, therefore, very different from that of either Japan or China. Japan borrowed abroad to finance her industrial development, but retained control of the capital in her own hands, and eventually evolved from a debtor to a creditor nation. China also resorted to foreign capital and permitted foreign enterprises to work within the country, but her defaults on foreign obligations have made foreign investors shy of Chinese investments, so that capital has been more expensive and more difficult to procure than in India. India,

¹ As well as in establishing banking, insurance, and coastal shipping and in constructing the railways and conducting overseas trade.

through her easy access to the London capital market, has enjoyed a definite advantage in this respect in comparison with China, but in comparison with Japan has suffered from the limitation that her use of imported capital has carried with it outside control over the choice of investments, and hence over the general trend of economic development. (It is sometimes alleged that investment has been guided by British rather than Indian interests, that profits and interest have been drained out of the country, that enterprise has been concentrated upon commercial, and a few special types of industrial, concerns to the neglect of broader industrial needs, that Indians have not enjoyed full opportunities for technical and managerial training and experience, and that undue advantage has been taken of the cheapness and abundance of Indian manual labour.) Although such allegations may exaggerate the evils, and may erroneously attribute the latter to deliberate policy, some of them contain an element of truth, and the problem has arisen how to secure for India the advantages without the disadvantages of the continued use of foreign capital. The Indian External Capital Committee (1925) adopted the common-sense view that foreign capital was beneficial to India, but that the increased use of indigenous capital would be still more advantageous. The Committee, however, recommended that direct financial aid, such as a bounty, should not be granted to any particular undertaking unless reasonable facilities are granted for the training of Indians, and unless, in the case of a public company, the latter is registered in India, has a rupee capital, and a certain proportion of Indian directors.¹ These principles were accepted by the Government, which has also encouraged Indian industries by making all stores purchased by the Government from abroad liable to duties on the same terms as merchandise imported on private account;² by establishing a Central Stores Department, with revised rules; and by instituting the 'Rupee Tender System' (Jan. 1931), whereby purchases of stores shall

¹ *Department of Overseas Trade Report, 1926-7*, p. 54.

² See Customs Act 1924.

normally be made in India, as a result of tenders called for in that country, payment being made in rupees.¹

At this point reference must be made to one characteristic of European enterprise in India which affects fundamentally the conditions of industrial production. This is the peculiar form of organization, known as the Managing Agency System, which was adopted during the nineteenth century, and, in spite of much criticism, still prevails not only amongst European concerns, but also amongst Indian firms engaged in modern types of production.

The Managing Agency System is one whereby, when a company is formed, the actual management is handed over to another firm—usually a well-known, long-established trading concern—which for this purpose is appointed its managing agent. The new company may be formed either in Europe, with European capital, or in India, with rupee capital. Industrial, plantation, and mining enterprises may all be organized in this way. The managing agent firm usually promotes the new company, helps to finance it (generally retaining enough shares to ensure ultimate control), and directly undertakes production and marketing. Each managing agent may thus control a number of firms engaged in different types of enterprise and obtains an income from fees for office expenses, from commission for management (based on either output, sales, or profit), from the sale of goods to the concerns managed, and from profits on the shares owned.

The advantages are that expert, reliable, and continuous management is secured, economies are obtained in administration and from the joint purchase of stores and materials needed by the various companies, and that joint selling organizations can be established for each type of product. Small companies in particular profit in this respect and are enabled to extend operations beyond the point which would be possible if they were dependent on their own resources. The system is criticized on the grounds that it leads to undue concentration of control;² often hinders

¹ *Department of Overseas Trade Report, 1927-8*, p. 58, and 1932-3, p. 91.

² The managing agents in practice control the nomination of directors,

initiative and enterprise, as managing agents tend to concentrate upon well-trying types of enterprise (especially during a depression); offers opportunities for exploitation and fraud; and leads to evils arising out of the possible clash between the interests of the various firms whose affairs may be in the hands of the same managing agent. The system also tends to perpetuate the racial grouping of interests, and thus to prevent co-operation between Indian and British firms. In the past it has undoubtedly promoted industrial development, but appears to many observers to have outgrown its utility. It is apt to subordinate the interests of shareholders to those of the managing agents, to limit unduly the number of individuals concerned in the direction of industry, to prevent the establishment of independent boards of directors, and to hinder the development of a sound relationship between industry and banking.

The worst evils are found in the cotton mill industry, where the managing agents' representatives have financial rather than technical training and experience,¹ and where the managing agency has become practically an hereditary office, passing from father to son irrespective of ability and experience. Thus the system tends at its worst to perpetuate what are, perhaps, the two chief factors preventing more rapid industrial development in India, i.e. the deficiency of men capable of industrial leadership, and inefficient industrial organization. On the other hand it has rendered important financial services both in normal times and in periods of depression.

The problem of industrial finance has developed step by step with modern large-scale industry. Little capital was needed by the old indigenous industries, whilst the 'shroffs', indigenous money-lenders, bankers, &c., provided remittance facilities and performed various banking functions. During the nineteenth century industries under foreign control could obtain capital from abroad, whilst

and the same names appear over and over again on the various boards of directors.

¹ It is said that out of 175 directors of Bombay cotton mills, only 11 have technical qualifications.

adequate financial facilities were afforded them by the European-controlled joint-stock banks which began to be established. But since the beginning of this century, with the increase in industrial and other joint-stock concerns, the Swadeshi movement, and the new industrial policy of the Government, the demand for capital has greatly increased. Modern financial facilities have greatly developed, though it is true that they have been available mainly to foreign and well-known Indian firms.

There is a scarcity of capital for industrial purposes in India and this is partly due to competition from other forms of investment. The main body of Indian investors still prefers to invest in real property, ornaments and jewellery, money-lending, trade, and Government securities rather than in industry, in which many serious losses have been incurred. Moreover Indian investors expect a high return on their capital, at least 9 to 10 per cent.¹ Hence industry has had to rely on a limited class of investors, whilst the high cost of capital has retarded development and confined enterprise to fields yielding high profits.

The lack of co-operation between Western and indigenous enterprises is reflected in the division of financial institutions into two classes—European and indigenous—without any close interdependence, whilst there is no adequate central control even of European credit agencies.

The European credit agencies concerned with industrial financing are the Imperial Bank, with its 162 branches, and the joint-stock banks, whilst industrial capital is also provided by managing agents and depositors. Indigenous agencies include various types of bankers, money-lenders, 'shroffs', and loan offices. There is no close connexion between European and indigenous credit agencies, and no developed market for discounting indigenous trade bills. The financial facilities available for indigenous concerns are therefore unsatisfactory, interest rates vary over

¹ The Tariff Board in determining a selling price which would give a 'fair return' on capital invested, estimated for not less than 10 per cent. on ordinary shares.

an extraordinary wide range, and indigenous rates do not bear any definite relation to the Imperial Bank rate.¹ Moreover financial control is divided between the Government (which controls currency) and the Imperial Bank, whilst the Imperial Bank rate has little influence on the general credit situation, and fails to control interest rates throughout the country. The great defect is not so much the high average rate for money as the great variations and fluctuations (including seasonal fluctuations)² in the rates charged.

The problems of providing 'block' and 'working' capital differ fundamentally and must be considered separately.

In India the principal modern industrial concerns have obtained their block capital from public or private subscription of shares, direct deposits, especially prevalent in the case of the cotton mill industry,³ and money put up on private account by individuals, firms, and partnerships. 'Under-capitalization' has been and still is one of the chief defects of Indian industries. Too often the initial paid-up capital has been insufficient to pay for the block capital required and quite inadequate for even the minimum working capital.⁴ Hence permanent financial needs have been met by fluctuating and short-term funds from direct deposits or from banks. On the whole it appears that established industries and well-known firms have encountered little difficulty in raising initial capital, but that difficulties arise for new types of industries and small concerns. The chief need is for a wider class of investors, and for a better developed capital market.

¹ The large joint-stock banks advance at 1 per cent. above the Imperial Bank rate; smaller banks at 2-3 per cent. above; indigenous concerns charge 12-34 per cent. and even more in times of stringency.

² The Imperial Bank now has power to issue emergency currency up to a certain limit in times of seasonal stringency, but this has proved an inadequate remedy, largely because such an additional currency may not be issued until the bank rate has reached 6 per cent.

³ In Bombay and Ahmedabad short term deposits have provided part of the block, and a large proportion of the working capital. This is obviously dangerous, and has led to great difficulties when, during a depression, such capital has been withdrawn.

⁴ Cf. Lokanathan, *Industrial Organization in India* (Allen and Unwin, 1935).

Working capital is at present obtained from private deposits, from the entrepreneurs and their friends, and from loans from joint-stock or indigenous banks. The danger of relying on short-term private and bank deposits for permanent needs is apparent. On the other hand it appears that the policy of the joint-stock banks may be unduly rigid. The method of hypothecation of stocks is unsatisfactory, partly because of the inconvenience involved, and partly because it has come to be looked upon as a sign of financial weakness, utilized only as a last resort, and hence when used endangers the reputation of the firm. On the other hand the requirement of two signatures, one of which should be that of a managing agent, tends to penalize smaller concerns, to over-emphasize the importance of the managing agent, and hence to perpetuate the excessive concentration of industrial leadership and to delay the development of a sound relationship between industry and banking.

It may be concluded that, although capital is undoubtedly dear in India, the more serious problems are due to defects in industrial and financial organization. The chief needs are: (i) improvements in industrial organization in general, including reforms in the Managing Agency system and in methods of training and recruiting industrial leaders; (ii) reforms in industrial finance, including a change in policy as regards capitalization, a prevalent weakness being the insufficiency of depreciation reserves, depreciation not being considered as an item in costs; (iii) closer co-operation between European and indigenous enterprises and institutions, and some modification in the short-term credit and discounting policy of the banks; (iv) a Central Bank, with power to control credit.

The Indian Banking Inquiry Committee, which reported in 1931, naturally included industrial finance in its survey, and made suggestions designed to remedy some of these defects. Its relevant recommendations included the establishment of a Reserve Bank, measures to increase contact between joint-stock and indigenous banks, and the establishment of an Industrial Corporation

to promote Public Utility Undertakings (the proposal for an Industrial Bank being rejected by the Committee). In accordance with the first recommendation the Reserve Bank Bill was passed in February 1934, and a Reserve Bank is shortly to be established.¹

In conclusion two additional factors affecting the costs and organization of industry may be mentioned, namely the size of industrial units and the localization of production.

At present the prevailing size of industrial units is smaller in India, particularly in the cotton mill industry, than in competing countries, such as Lancashire and Japan. It is probable that at present larger units would not prove remunerative, owing to the limitations of managerial ability. Hence full advantage cannot be taken of the economies of large-scale production. The localization of industries is at present very defective, e.g. in the cement and sugar industries. In the past insufficient attention has been paid to the problem, and the welfare of industries has suffered from over-centralization of producing units, leading to excessive costs of transport for raw materials and finished products, remoteness of factories from the labour-recruiting districts, and very bad overcrowding in working-class city areas.

(b) *The Industrial Policy of the Government*

During the nineteenth century the policy of the Government of India was, as already mentioned, in principle *laissez-faire*, although in practice the urgency of the famine problem and political and military exigencies led to the adoption of a constructive policy as regards public works. Nothing was done to promote modern industries nor to assist the depressed indigenous industries. The moderate 'revenue' tariff was gradually reduced and finally entirely removed (except for excisable articles) between 1882 and 1894. In 1894 and 1896 a return was made, however, to

¹ It is of interest to note that the Bank is required to report within three years on the problem of providing an adequate link between the indigenous and European types of banking.

revenue duties, the general rate being 5 per cent. (with $3\frac{1}{2}$ per cent. on imported, and a countervailing $3\frac{1}{2}$ per cent. excise on mill-produced cotton piece-goods).¹ This tariff remained in force, with minor modifications, until 1916.

Meanwhile a considerable change occurred in the general economic policy of the Government, which under Lord Curzon (1899-1905) began to encourage agricultural improvements and established closer relations between the Government and the commercial and industrial classes, marked by the establishment of a special Department of Commerce and Industry in 1905. Lord Curzon's Government favoured the efforts of the Madras Government to assist indigenous industries, such as hand-weaving and tanning, and also the establishment of Provincial Departments of Industries, but the Home Government refused to endorse this policy, so that until the War period the assistance given to industry was mainly concerned with the collection of information, a certain amount of research work, and some provision for industrial education and training.

The War revealed clearly Indian industrial deficiencies and potentialities, and a fundamental change took place in economic policy. The Government wished to develop India's industrial resources for war purposes and in order to supply deficiencies created by the cutting-off of European imports. The Government's industrial activities were concentrated in the hands of the Munitions Board, which undertook surveys, research, and in some cases actual production, and also assisted private enterprise in a number of ways. Departments of Industries were established in all the chief provinces. At the same time exports, imports, and railway and ocean transport were rigorously controlled. Meanwhile, in 1916, the Industrial Commission had been appointed. The report of 1918 concluded that although India's industrial potentialities and resources were great, she had as yet been little affected by the 'march

¹ Imported goods are classified in a series of schedules, to which different rates apply, from 'free goods' upwards. The largest class, including all goods not mentioned elsewhere, is subject to the 'general rate'.

of modern industry', and that in future the Government ought to play a more active part in industrial development. The chief recommendations dealt with improved departmental organization for the encouragement of industries, improvements in technical training and education, reorganization of the scientific staffs of industrial departments, the giving of technical and financial aid to industries, the encouragement of industrial co-operation, and the provision of improved transport facilities. The Report was accepted by the Government and an Imperial Department of Industries was established in 1921, but the allocation of Industrial Development as a 'provincial' subject after the Montagu-Chelmsford Report increased the difficulty of giving effect to many of the recommendations, not all of which have come into force. Financial stringency has, besides, hindered the work of the Provincial Departments.

The war conditions resulted also in a complete change of tariff policy. The general level of tariffs began to be raised (at first purely for revenue purposes) in 1916, and in 1922 the 'general rate' was raised to 15 per cent., with higher duties on certain articles, chiefly luxuries. The duty on cotton piece-goods was left at 11 per cent., which—as the excise remained at $3\frac{1}{2}$ per cent.—provided a degree of protection. A duty of 5 per cent. was imposed on cotton yarns, which had previously been on the free list.¹ Meanwhile 'fiscal autonomy', interpreted to mean non-interference by the Home Government with duties agreed upon by the Government and the Legislature,² was granted in 1919, in connexion with the Constitutional Reforms. Eventually a Fiscal Commission was appointed, and in 1922 recommended a policy of 'discriminating protection', in spite of the protests of a minority who demanded unconditional and more far-reaching protec-

¹ The tariff treatment of cotton-goods imports into India is dealt with generally here as part of the Government tariff policy as a whole; it is dealt with more specifically and in greater detail in subsection (c) (The Cotton Mill, and Iron and Steel Industries).

² For a definition of the practical meaning of 'fiscal autonomy' in India see later, pp. 269 et seq.

tion. This policy introduced the principle that claims for protection should be investigated by a Tariff Board, which might recommend protective duties for any Indian industry possessing natural advantages, and likely eventually to be able to produce at a profit without assistance, but unlikely to develop without protection.

The Tariff Board began by considering the steel and related industries, and the duties and bounties recommended were imposed by the Steel Industries (Protection) Act of 1924. Various modifications have since been introduced. In 1927 the steel duties were somewhat reduced in pursuance of the Government's policy of withdrawing protection from an industry when it had become established. Preference for British steel goods was at the same time introduced. Recently the whole scheme has been revised, retaining and extending the preferential principle.¹

Meanwhile the Tariff Board has carried out a series of inquiries into the claims of other industries, and protection has been extended to matches, certain types of paper, cotton piece-goods (in 1930), certain chemicals,² sugar, wood-pulp, wire and wire nails, silver thread and wire, and wireless apparatus. Preference for British steel and cotton piece-goods was recommended and adopted in 1927 and 1930 respectively.

The granting of protection has been by no means indiscriminate, and a large number of applications have been rejected where no good case could be made out on grounds such as those admitted as valid by the Indian Fiscal Commission.

The results of this policy may be summed up as follows. Customs have now become the chief single item of revenue in India, and it is difficult to see how the budget could have been balanced without the enormous increase, since 1916, from this source. The protected industries have undoubtedly benefited greatly, at the cost of enhanced prices to consumers and at the cost of the taxpayers in the

¹ See p. 266, below.

² Most of these duties have now been removed, as the hoped-for re-organization and development did not take place.

case of bounties.¹ The steel industry, for instance, has been enabled to continue to produce and expand during the periods when world prices have been reduced to ruinous levels. The Bombay Cotton Mill Industry has been saved, if not from depression, at least from the worst results of Japanese competition.² The match industry has been firmly established, so that imports are now negligible, whilst India is now practically self-sufficing as regards sugar, which formerly ranked among her chief imports.

If the protection policy has preserved Indian industries from the contraction which the depression might have produced, there has, on the other hand, been little or no indication of any resulting acceleration in the tempo of industrialization,³ and there have even been complaints that Indian industries utilizing imported raw or semi-manufactured goods have been injured by the revenue duties, some of which have therefore been reduced or removed on the recommendation of the Tariff Board.

After 1922 the revenue duties were unaltered in essentials until 1931 when, owing to the depression and the serious budgetary position, it became necessary to increase taxation. Amongst other measures surcharges were imposed on all existing duties exceeding $2\frac{1}{2}$ per cent., whilst the emergency budget of September 1931 further increased all duties exceeding $2\frac{1}{2}$ per cent. by 25 per cent. of the existing rates.⁴

Since 1931 the chief tariff changes have been connected with increased Japanese competition in the cotton piece-goods trade, and with the extension of Imperial Preference by the Ottawa Agreement. In regard to the former, the duties on non-British cotton piece-goods were raised to 50 per cent. in 1932 and to 75 per cent. in 1933, whilst at the same time the Indo-Japanese treaty of 1904 was

¹ Cf. Dey, *The Indian Tariff Problem*, 1933.

² The cotton duties and agreements are discussed at length below, pp. 266 et seq.

³ The proportion of the population dependent upon industry was slightly less in 1931 than in 1921.

⁴ At the same time a low duty was imposed on raw cotton imports.

denounced, and negotiations began for a new commercial agreement with Japan, which was concluded early in 1934.¹ In addition the Safeguarding of Industries Act, 1933, gave the Government power to alter duties, in case of emergency, without legislation. Under this Act no less than 1,433 applications for assistance were received, but the Government thought that use of the Act might prejudice the negotiations with Japan, and decided to introduce *ad hoc* legislation instead. Accordingly the Indian Tariff Amendment Act of February 1934 joined specific duties to the existing *ad valorem* duties (the higher of which will operate) on a large number of manufactured articles, including many kinds of textile manufactures, china, porcelain, soaps, &c., which were being sold at exceptionally low prices. The duties apply to goods from all non-British countries, but principally affect imports from Japan. This was in accordance with the principles of the Ottawa Agreement of 1932, which must now be examined.

In the past Imperial preference has been opposed in India, partly because of suspicion due to the alleged influence of Lancashire opinion and interests on tariff policy in India, and partly because it was considered that India had 'little to gain but much to lose' from such a policy. The latter argument contained much truth so long as Great Britain remained a Free Trade country, but the situation has been completely altered by the change in British policy since 1931. Indian trade would be seriously injured if excluded from the new British preferential system.

The Indian Agreement formulated at Ottawa followed the same general lines as the agreements with the Dominions, but included certain provisions designed specifically to suit Indian conditions and interests. In general the Agreement provided for the admission of Indian goods to the British market, either free or at preferential rates, in return for a preference in India for a long list of British manufactures. In drawing up the Agreement the principles laid down by the Indian delegation, namely, that India's existing scheme of protection could not be relaxed,

¹ For further details see pp. 226 et seq. below.

that her customs revenue must not be imperilled, and that she should not be bound for a series of years, were fully respected. The provision for making preferential arrangements with the non-self-governing Colonies, as well as with the Dominions, is of special importance to India, and offers valuable prospects for retaining and developing overseas markets (e.g. in East and West Africa, the British West Indies, and Malaya) for textiles, and for securing new markets for new lines of export trade (e.g. Indian pig-iron and steel goods).

Another important provision was the promise that the British Government would co-operate in any scheme to promote the greater use of Indian cotton in Lancashire. An Indian Cotton Inquiry Committee¹ was appointed by the Lancashire industry and carried out experiments as to the best methods of using Indian cotton, whilst two Cotton Commissioners have been sent out to investigate conditions, report on cotton crops, and in general to facilitate the supply and sale of Indian cotton to Lancashire.

The Ottawa Agreement deliberately omitted provisions for the treatment of British steel and cotton goods of types that are subject to protective duties in India, as Tariff Board inquiries into these two industries were proceeding at the time. It was, however, provided that steel goods subject only to revenue duties should pay a standard rate of 20 per cent., and a preferential rate, for British goods, of 10 per cent. In addition, a supplementary agreement provided special treatment for British galvanized sheets in return for the continued free entry of Indian iron and steel into the United Kingdom. Since then the Tariff Board reports have been issued, and legislation retaining the preferential principle has been passed for both steel and cotton goods.

Finally a Trade Agreement was signed on behalf of the British and Indian Governments on January 9th, 1935, supplementing the Ottawa Agreement, by bringing within its scope protective (as well as revenue) duties on British

¹ Since enlarged and renamed the Lancashire Indian Cotton Committee.

goods. The Agreement does not alter existing rates of duties, but lays down the principles to be followed in fixing protective duties on British goods. It provides (*a*) for the retention of Imperial preference and for the existing margin of preference; (*b*) that Indian protective duties shall not be more than sufficient to equate the prices of imported goods to the fair selling price of similar Indian goods;¹ (*c*) that if and when the emergency surcharges of 1931 are removed from the generality of goods, they shall also be removed from cotton piece-goods imported; (*d*) that full opportunities will be afforded to any British industry to state its case before the Indian Tariff Board, and that in the event of radical changes in tariff rates an inquiry should be instituted on the request of the British Government.

In return the British Government gives the following assurances: (*a*) that efforts should continue to encourage the use of Indian raw cotton in England, and that similar action should be taken with regard to other Indian commodities; (*b*) that Indian pig-iron should be admitted free so long as the existing privileges to British steel goods remain in force; (*c*) that India should receive a share in any privileges which may be given to British goods in colonial markets.

Although the Agreement does not require ratification by either the British or Indian Legislatures, a resolution for its rejection was carried by 66 votes to 58 on January 29th, 1935. This in no way affects the validity of the Agreement, but is an indication of the attitude of the Congress Party to the trade policy of the Government of India.

The Ottawa Agreement has undoubtedly tended to promote India's trade within the Empire. For instance, India's position in the British market as regards various raw materials,² especially raw cotton, has distinctly improved, as it has also for a number of manufactures, includ-

¹ This principle has already been adopted in the Australian and Canadian Agreements.

² e.g. rice, undressed hides and skins, magnesium chloride, linseed, castor seed, groundnuts, and lead.

ing coir yarn and mats, vegetable oil, oilseed cake, paraffin wax, woollen carpets and rugs, sandalwood oil, shellac, and pig-iron. India has captured practically the whole British market for imported pig-iron, and in 1933-4 India supplied 8 per cent. of Lancashire's imports of raw cotton as compared with 4 per cent. in 1932-3. It is hoped that in three to four years Lancashire may consume 500,000 bales of Indian cotton.¹ It is sometimes overlooked in India that the United Kingdom is the best market for Indian goods, just as India is the best market for British goods.

From the British point of view the preferences have already helped to improve the position of many British manufactures in the Indian market, although the depreciation of the yen more than counterbalanced any advantage from the preferences in the case of certain articles such as apparel, various textiles, umbrellas, and bicycles.² The British share of India's imports rose from 37 to 41 per cent. between 1932-3 and 1933-4, whilst the share of India's exports taken by the United Kingdom rose from 28 to 32 per cent.

The influence of preferences on the trade between India and the non-self-governing Colonies is at present difficult to trace, but this part of the scheme is capable of considerable expansion and is still only in its initial stages.

After the conclusion of the new Indo-Japanese Agreement—to be dealt with in the next subsection—which fixed quotas for Japanese piece-goods and a duty of 50 per cent. on non-British piece-goods, the Indian Tariff Textile Protection (Amendment) Act was passed, giving statutory effect to the relevant clauses of the Japanese Trade Convention and of the unofficial agreement drawn up at the end of 1933 between the Indian and British

¹ Cf. *Department of Overseas Trade Report on British Trade in India for 1933-4* (1934). In 1933-4 India sent 342,000 bales of raw cotton to England, compared with 167,000 in 1932-3.

² Cf. Report on the working of the scheme of Preferences. It should be noted that the figures on which these conclusions are based are necessarily not quite up to date. The situation has somewhat changed since the conclusion of the Indo-Japanese Agreement.

textile industries.¹ The Act imposes duties, with preference to British goods, and with specific alternatives to the *ad valorem* duties on a number of different classes of textiles. For cotton piece-goods it embodies the duties, namely 50 per cent. on non-British goods (as against 25 per cent. on British goods), agreed upon in the Indo-Japanese Convention. It also transfers artificial silk goods to the protective schedule, with a preference for British products.²

The Budget of 1934 maintained the existing position with regard to tariffs, except for minor modifications in the duties on tobacco and silver, and the abolition of the export duty on raw hides.

Finally, the question of India's fiscal autonomy must be more fully discussed, in view of the widespread allegations that the principle has not been observed.

It has already been pointed out³ that the Fiscal Autonomy Convention means that the Home Government will not interfere with tariff measures agreed upon by the Government of India and the Legislature. It does not mean that the final word on tariff questions rests with the elected representatives of the Indian peoples.

Indian opposition to the preferential duties for British steel, introduced in 1927, was based on objections to the principle of Imperial preference. The allegation, which Indian publicists have always been ready to advance, that the principle of fiscal autonomy had not been observed, first obtained a semblance of substance in 1930, when fresh proposals were put forward for increasing the duties on cotton goods, and introducing the preferential principle for British goods.

At this time the principle of discriminating protection, but not that of Imperial preference, had been accepted. The problem was how to protect the Indian Mill Industry adequately, without unduly penalizing consumers by raising the prices of 'non-competing' imports. The Indian

¹ See p. 270 below for further details.

² It may be noted that the duty on cotton yarns is $6\frac{1}{4}$ per cent. for non-British, and 5 per cent. for British yarns, with alternative specific duties on counts below 50's.

³ p. 262 above.

mills needed protection chiefly against medium quality plain grey goods, mainly imported from Japan, competition not being serious from the coloured and bleached goods which form the bulk of imports from Lancashire. To impose a surcharge on Japanese goods would have involved the abrogation of the trade convention with Japan and a serious danger of retaliation by Japan.¹ It was therefore decided to proceed by giving preference to British piece-goods, but it was made perfectly clear that this would not involve acceptance of Imperial preference as a principle. The Government of India was fully aware of the suspicions which its proposals were certain to arouse, but the interests of the Indian consumers and of Lancashire happened to coincide.

In his Budget speech Sir George Schuster emphasized the reality of the Fiscal Autonomy Convention, assuring the Assembly that decisions were left to the Government of India, but frankly admitted that 'in the final stages' a communication had been received from the British Government, asking for reconsideration of the situation from the point of view of reactions in England, as well as in India. The Government of India's reply had been made that, although impressed by the British Government's representations, the main proposals must go forward. Indian interests must come first, though the Government was concerned to avoid unnecessary injury to British interests. Sir George Schuster proceeded to propose the raising of the duties on cotton piece-goods from all sources to 15 per cent., with an additional duty of 5 per cent., and a minimum of $3\frac{1}{2}$ annas per lb. on plain grey goods, on non-British imports.

Opposition in the Assembly was so serious that eventually, in order to secure the necessary majority, an amendment was accepted which imposed the minimum duty of $3\frac{1}{2}$ annas per lb. on plain grey goods of British as well as of non-British origin, and legislation on this basis was passed.²

The only possible ground for asserting that the fiscal

¹ Japan was India's chief customer for raw cotton and pig-iron.

² The Bill passed by 62 votes to 42 in the Legislative Assembly.

autonomy convention had been contravened was that consideration was given to Lancashire interests. Such 'consideration' prevails in parallel cases throughout the British Empire, though it may possibly be argued that the results in India, where responsible Government had not yet been introduced, are not quite the same as in the case of the self-governing Dominions.

It is clear, in any case, that in drawing up its original proposals the Government of India was concerned fundamentally with India's own interests, and that the motives behind the proposal for preference were economic and directed towards safeguarding the Indian consumer. The legitimacy of the British Government's action in making such representations can no more be called in question than their right to make the representations recently addressed to the Australian Government, protesting against increases in the Australian tariff on certain classes of cotton goods. In the latter case the grounds for protest may indeed be stronger, being based on the alleged contravention of certain clauses in the Ottawa Agreement, but the principle appears the same. If, in the representations made, convincing facts or arguments are included which had previously been overlooked by the other party, a modification of the duties originally proposed becomes a reasonable consequence.

The reality of Indian fiscal autonomy is perhaps best illustrated by the circumstances of the Ottawa Agreements. At the Conference India was represented by her own delegation of six members of which five, including the leader, were Indians. The delegation acted throughout without reference to, or contact with, the India Office in London and the Agreements themselves before being valid for India had to be ratified by the Indian Assembly. If further proof were needed, we may observe the course and methods of the Indo-Japanese trade negotiations. These were conducted in India without reference to 'home' opinion, and undoubtedly the Government of India had a perfectly free hand.

The controversy has arisen again in an acute form over

the Indo-British Trade Agreement.¹ Critics of the Government assert that the Agreement is one-sided, and complain that commercial interests were consulted in England but not in India. In the debate in the Legislative Assembly it was claimed that neither Indian opinion nor the Assembly had accepted the principle of Imperial preference except under threat, and that the Agreement safeguards British interests at the expense of Indian. In reply Sir Joseph Bhore maintained that there was no need to consult Indian opinion in advance, as the principles of the Agreement had already been endorsed by practice in India. 'Not one syllable of the agreement violated the Fiscal Autonomy Convention.'²

As the Agreement merely gives a 'more specific mould' to the existing policy in India, and as that policy was endorsed by the last Legislative Assembly, the Government of India is clearly within its rights in making the Agreement. At the same time it cannot be denied that the newly elected Legislative Assembly is opposed to the policy cemented by the Agreement.

The conclusion is that fiscal autonomy, as defined, is real, but that the political and constitutional situation inevitably entails the Government of India giving more weight, in formulating its proposals, to British interests, than would be the case if India had fully responsible government.

(c) *The Cotton Mill, and Iron and Steel Industries.*

The cotton mill, and iron and steel industries are the outstanding examples of Indian industries which compete, or may compete, in international markets.

In the cotton mill industry the position differs for yarn and for piece-goods, which must therefore be considered separately.

To-day, as also before the War, Indian mill yarn predominates in the home market, normally providing 90 per cent. of India's needs. The production of Indian mills increased from 682 million lb. in 1913-14 to 1,016 million lb. in 1932-3, falling to 921 million in 1933-4,

¹ Cf. pp. 266 et seq. above.

² *The Times*, Jan. 31st, 1935.

whilst imports, after remaining at 40 to 45 million lb. till 1932-3, fell to 32 million in 1933-4, and exports have declined from a pre-war average of 192 million lb. to only 16 million in 1933-4. Hence, although the Indian mills have increased their sales, prices have been depressed both by foreign competition and by the necessity of selling at home the large quantities formerly exported, mainly to China. Bombay, as the chief exporter of yarns, has been particularly hard hit by imports of yarn which are now mainly obtained from the Far East, instead of from Lancashire, as is shown by the following figures:

Percentage shares in yarn imports

	U.K.	Japan	China	Total for Far East
1913-14 . .	80	2	...	...
1929-30 . .	46	25	24	49
1931-2 . .	38	20	42	62
1932-3 . .	29	40	30	70
1933-4 . .	37	37	25	62

In some years imports from Japanese-owned mills at Shanghai exceed imports from Japan, but in 1932-3 imports from Japan itself were stimulated by the depreciation of the yen. Before the War Lancashire's staple line was yarn of counts 30's to 40's. To-day Indian mills have encroached on these counts, while the bulk of imported yarn of this quality comes from Japan, leaving to Lancashire mainly the higher counts.

The following table gives the main facts with regard to the production of and trade in cotton piece-goods:

*Quantity of mill-made cloth available for consumption in India**
(In million yards)

	1913-14	1927-8	1928-9	1929-30	1930-1	1931-2	1932-3	1933-4
Indian mill production . .	1164.3	2356.6	1893.3	2419.0	2561.1	2989.8	3169.9	2954.0
Net imports . .	3135.0	1939.6	1912.6	1896.9	872.6	759.9	1203.7	771.0
Exports of Indian goods . .	89.2	168.6	149.2	133.4	97.7	104.6	66.4	56.4
Available for consumption in India	4210.1	4127.6	3656.7	4182.7	3336.0	3645.2	4307.2	3695.6

* These figures exclude exports by land, which generally amount to a figure equal to about 4 per cent. of the 'total available'.

Whereas before the War imports formed three-quarters of the total available for consumption in India, and Indian mill products one-quarter, to-day the position has been reversed. Exports of Indian piece-goods have not altered greatly in quantity (except quite recently, owing to increased Japanese competition), but, as regards destination, whereas formerly the main markets were in the Far East, to-day they are in Persia, Ceylon, Iraq, East Africa, Malaya, and Arabia.

The Indian mills have thus greatly improved their competitive position, owing to improved efficiency, protective tariffs, the Swadeshi movement, and, at times, the Indian boycott of foreign products.¹ Nevertheless the total piece-goods 'available for consumption' in India as shown in the preceding table are to-day short of the 1913-14 figure, and hence have fallen *per capita*. But if hand-loom production is included it can be shown that the *per capita* consumption of all types of cotton piece-goods has slightly but definitely increased. In 1933-4 Indian mills supplied about 56 per cent., imports 15 per cent., and hand-loom 28 per cent. of the total available for consumption.² The hand-loom supply the coarsest qualities and certain 'specialities', the Indian mills intermediate, and imports from abroad the finer qualities, but the tendency is for improvement in the quality of Indian mill products, especially those exported.)

The following figures show the changes in the source of piece-goods imported:

Percentage Shares in Piece-Goods Imported

	U.K.	Japan	Netherlands	U.S.A.
1913-14 . . .	97.1	0.3	0.8	0.3
1928-9 . . .	75.2	18.4	1.0	1.5
1930-1 . . .	58.8	36.1	1.5	1.0
1932-3 . . .	48.7	47.3	0.4	1.7
1933-4 . . .	52.2	43.8	0.2	2.0

¹ The boycott has now ended.

² *Annual Review of the Trade of India, 1933-34*, p. 37.

Here, as for yarns, Lancashire has suffered chiefly from Japanese competition.

The Indian mill industry, after about 1923 entered a period of depression, the causes of which were investigated by the Tariff Board Report of 1927. The chief factors alleged to affect India as a whole were the loss of the export trade in yarn to China, the stabilization of the rupee at 1s. 6d. (of merely temporary importance), faults of organization and finance, and Japanese competition. Faults of organization and finance have already been discussed, but it should be added that in and after 1923 many mills were suffering specifically from the over-capitalization and over-generous distribution of profits of the War and post-war booms. Certain mills which had been 'conservatively' financed have been able to pay dividends all through the depression.

Japanese competition lay at the root of the demand for protection and continued to increase, despite the adoption and intensification of protective tariffs, until the recent Indo-Japanese Agreement fixed import quotas for Japanese goods.

From the Indian point of view the main reasons for Japan's competitive strength may be summarized as follows: (i) the superior equipment, organization, and finance of the Japanese mills; (ii) superior marketing organization; (iii) excellent organization for the purchase of raw material, full advantage being taken of cheap ocean freights and of the alternative sources of supply, i.e. U.S.A. and India; (iv) temporary advantage from the depreciation of the yen; and (v) advantages as regards labour supply and organization. It has already been mentioned that even since the levelling up of factory legislation, output per worker remains higher, and labour costs remain lower, in Japan than in India. Japan also gains an advantage from the use of the double-shift system and the more extensive employment of female labour, whilst the efficiency of Indian labour is adversely affected by climatic conditions and inferior factory organization and equipment. The greater prevalence of labour unrest in India is another disadvantage.

Bombay City has been particularly affected by the loss of the export yarn trade, by defects in organization and finance, and by labour, unrest. In addition wages are higher, owing to the higher cost of living, as are also local taxes, the cost of fuel, power, and water. The high cost of transporting raw cotton from the areas of production to Bombay City is another element in the situation.

The Indian cotton mill-owners, especially in Bombay, began to plead for protection as soon as the depression became severe.¹ Some relief was afforded in 1925 by the removal of the countervailing excise, but eventually in 1926 the Tariff Board was asked to investigate the claim for protection and reported in 1927. The Board's recommendations for an increase in the duty on piece-goods to 15 per cent. was not, however, accepted by the Government, on the ground that the cotton industry was already well established, and hence did not fulfil the first condition laid down by the Fiscal Commission. But the depression continued to be so severe that the Government was obliged to give way, and in 1930 transferred cotton goods to the protective schedule, the duties being fixed at 15 per cent. (or $3\frac{1}{2}$ annas per lb., whichever was the higher) for plain grey goods of British origin, and 20 per cent. (or $3\frac{1}{2}$ annas) for grey goods of non-British origin. Other types were to pay the same *ad valorem* duties, but were not subject to the specific duties.

In 1931 the surcharges imposed by the Finance Act and the emergency budget increased the *ad valorem* rates on piece-goods to 25 per cent. on British, and $31\frac{1}{4}$ per cent. on non-British, goods, with equivalent increases in the specific duties on grey goods.

In spite of this Japanese competition became so intense that in August 1932 the duty on non-British cotton piece-goods was raised to 50 per cent. Even this proved no

¹ In 1923 the duty on piece-goods was 11 per cent., as compared with a general revenue duty of 15 per cent. The countervailing excise remained at $3\frac{1}{2}$ per cent.

barrier to the increasing Japanese imports, owing largely to the depreciation in the yen; hence in 1933 the Government denounced the Indo-Japanese Trade Convention of 1904, which provided for mutual 'most-favoured nation' treatment, and raised the duty on non-British piece-goods to 75 per cent.

Japan retaliated by announcing a boycott of Indian raw cotton, but the Government adopted a policy of compromise, and negotiations for a new trade agreement began in September 1933, a Japanese mission being sent to India for the purpose. The resulting agreement (adopted in general terms in January 1934, although details were left to be worked out later) allots Japan an annual import quota of 125 million yards unconditionally, 325 million yards if she purchases 1 million bales of Indian cotton, and 400 million yards if she purchases $1\frac{1}{2}$ million bales.¹ It was agreed that the duty on non-British goods should be 50 per cent., and that the agreement (based on a mutual 'most-favoured nation' foundation) should remain in force until 1937. Extra duties may be imposed on Japanese goods if the yen depreciates below the level attained at the end of 1933.

This agreement, the early effects of which have been mentioned in Chapter I, has the advantages that it ensures the continuance of trade connexions between Japan and India, safeguards the Indian mill industry, and secures a stable market for Indian cotton. On the other hand there are from the Indian point of view loopholes in the agreement.² For instance Japan might increase her markets in India by exporting from Japanese mills in Shanghai, or she might concentrate on rayon goods, to which the quota does not apply. Japan first sent artificial silk yarn to India in 1931-2, and in 1932-3 sent 1.79 million out of a total import of 11 million lb.³ In the latter year Japan sent India 111.7 million yards of artificial silk piece-goods (out

¹ Japanese piece-goods are divided into classes, with quotas for each, but some variations between categories are permitted.

² Cf. *The Economist*, London, Feb. 24th, 1934, p. 464.

³ Italy sent 5.6 millions and Britain 1.6 millions.

of a total Indian import of 112.8 million) despite the 50 per cent. duty.¹

Meanwhile negotiations had also been proceeding between Indian and Lancashire mill-owners, a textile mission, headed by Sir William Clare Lees, visiting India at the same time as the Japanese mission and resulting in the Lees-Mody Pact of October 1933.

It was agreed that protection against British cotton goods should not be increased, that when the Government found it possible to remove the surcharges of 1931 the Indian mill-owners should not propose fresh duties on British cotton piece-goods, that preferences should continue, and that the duties on artificial silk and mixed textiles should be reconsidered on a preferential basis. In return Lancashire promised to share advantages in the colonial markets with India, and to stimulate the use of Indian cotton along the lines suggested at Ottawa. Finally both parties bound themselves to the principles of direct discussion and negotiation. These principles have been endorsed by the Indo-British Trade Agreement of January 9th, 1935.²

A great change in the attitude of Lancashire towards tariff policy in India had become obvious after the War, due probably in part to increasing Japanese competition in the Indian market. Although Japanese imports have affected the Indian manufacturer by reducing the level of prices of cotton yarn and piece-goods in India, it is Lancashire which has so far borne the brunt of the competition, Indian mill production and sales having continuously expanded. This change in Lancashire's attitude was clearly demonstrated when in 1925 the counter-vailing excise was removed. The excise had been imposed in 1896 specifically to placate Lancashire's complaints at the unfairness of a 5 per cent. import duty. But in 1925 few complaints were heard, and the removal of the excise was even welcomed as aiding the Indian mills to withstand Japanese competition.

¹ The Indian Tariff (Textile Protection) Amendment Act, 1934, admits British artificial silk goods at 30 per cent.

² Cf. p. 266 above.

On the other hand, until quite recently there was no sign that India wished to co-operate with Lancashire. Great indignation had been expressed at the preference which, as mentioned above, was accorded to British cotton goods in 1930, and it was asserted that Lancashire had again interfered in Indian tariff policy for its own ends and that the principle of 'fiscal autonomy' had been flouted. The Government of India replied that the preference had been accorded for India's sake, on the ground that a duty of 20 per cent. on British goods would simply raise the prices of Lancashire products to consumers, such goods not being produced at present in India, whereas Japanese piece-goods compete directly with Indian products, and hereafter relations improved sufficiently to enable the agreement described above to be made.

Hence the common menace of cheap Japanese goods has at last led to a measure of co-operation between Indian and Lancashire mill-owners. Even so the agreement with Lancashire was confined to the Bombay Mill-Owners' Association, the Ahmedabad Mill-Owners' Association having refused to co-operate.¹

It has already been seen that the Indian Tariff Textile Protection Act of 1934 has introduced a scheme of protection based on the agreement with Japan and Lancashire,² while the principles of the agreement have been endorsed by the recent Indo-British Trade Agreement. Undoubtedly the agreement with Lancashire and the recent legislation are a sign that relations are improving between India and Lancashire. Although duties remain high, the fact that they will not be increased so long as the agreement holds gives greater security to Lancashire, whilst the duties may be reduced should the financial position improve. Preference has been secured and the way cleared for constructive measures to increase co-operation to the advantage of both parties. In other words, the policy adopted gives Lancashire a chance to adapt

¹ The Ahmedabad mills have prospered, in spite of the depression, and have gained much trade at the expense of Bombay.

² Cf. p. 265 above; and *The Times*, London, July 24th, 1934.

herself to more stable, if limited, opportunities, and paves the way for increased markets for Indian raw cotton, and for both India's and Lancashire's piece-goods. In 1934 British exports of cotton goods recovered to the 1932 level (approximately £8 million) and marked a 20 per cent. rise over the 1933 figures, the improvement extending to all classes except grey cloth. On India's side of the bargain, there was a very pronounced increase in the British purchases of Indian raw cotton—360,000 bales against 132,000 in 1933, a rise, that is, of 57 per cent.

Steps have in the meantime been taken which assist Indian cotton goods in colonial markets. The Anglo-Japanese Commercial Convention of 1905 has been denounced, and a quota policy announced for Japanese textiles imported into certain colonial markets (including the British West Indies, Ceylon, and Malaya),¹ where cheap Japanese goods of various types have recently made amazing progress.² Japan has protested against this policy, which she maintains infringes the 'most-favoured-nation' principle, and negotiations are proceeding.

The position and prospects of the Indian iron and steel industry remain to be considered.

This is an industry with splendid 'natural' advantages, which has been developed by Indian capital and enterprise, and which has already made great headway both in the home and in foreign markets. Pig-iron is at present its chief export, although exports of other types of iron and steel products, including steel bars, tend to increase.

India has unique advantages for the production of pig-iron, of which she is the cheapest large-scale producer in the world. She has excellent iron-ore, found in proximity to coal, and good supplies of other necessary raw

¹ Cf. *Trade and Engineering Supplement of The Times*, May 19th, 1934. In Ceylon and the Straits Settlements these proposals have met with great opposition. The Congo Basin Treaties prevent preferential duties in British East Africa.

² Cf. *The Times*, June 21st, June 27th, and Aug. 16th, 1934.

materials, e.g. limestone, magnesite, and manganese. Her pig-iron needs no protection and any surplus produced above her own needs for the production of steel can be readily sold in foreign markets. Three firms,¹ besides the Tata Iron and Steel Company, at present produce and export pig-iron, but Tata produces alone about 70 per cent. of the total² and is still the only producer of steel in India.

On the other hand India suffers from certain disadvantages in the processes connected with the conversion of pig-iron into steel, and it is this fact that has necessitated the imposition of protective tariffs on steel goods. Some of her disadvantages have been of a temporary character. These include the extremely unfortunate conditions under which the 'greater extensions' (begun in 1916) were carried out, involving purchases at tip-top prices, and several unexpected years' delay before production started; exchange difficulties; exceptionally keen competition owing to world-wide over-production in the steel industry; the expense of employing expert foreign technicians until Indians could be trained; the expense of providing a training institution; labour disputes, and unfortunate contracts for the purchase of coal. Other disadvantages are of a more permanent character which accounts for the continued necessity for protection. These include the high cost of capital in India, this being of particular importance in an industry requiring much fixed and working capital, the necessity of importing plant and machinery, and the difficulty of securing skilled supervisory, technical, and manual labour.³ In addition the Indian industry was particularly hard hit by the depression because its development was too recent to have enabled it to build up reserves.

The recent progress of the steel industry is shown by

¹ The Bengal Iron Company; Indian Iron and Steel Company; and the Mysore Iron Works.

² Normally about 1 million tons.

³ The Tata Company has a far larger labour force in relation to output than Western steel firms.

the following figures of production at the Tata Iron and Steel Works:

(In 1,000 Tons)

	1921-2	1925-6 ¹	1929-30	1931-2	1932-3	1933-4
Pig-iron . . .	270	573	740	804	672	841
Steel ingots . . .	182	470	580	602	590	721
Finished steel . . .	125	320	408	449	427	531

The total production of pig-iron in India in 1931-2, 1932-3, and 1933-4 was 1,070,000 tons, 880,000 tons, and 1,109,000 tons respectively.

The effect of domestic development on the import trade has been that, whereas before the War India imported an annual average of 820,000 tons of iron and steel goods,² to-day she imports less than 400,000 tons per annum (329,000 in 1933-4). At the same time exports have risen steeply, from 42,000 tons pre-war to 337,000 in 1932-3, and 516,000 in 1933-4. Pig-iron accounts for about 70 per cent. of the exports by weight. Hence at the present day the quantity of iron and steel products exported actually exceeds imports, though the value of the latter is about five times as great, because of the large proportion of expensive finished goods. The heavy fall in imports began only with the present depression. Increased production within India was up to that time absorbed by increased demand. It can therefore be said that Indian production, though increasing rapidly, cannot as yet supply the whole of India's normal needs. In the meantime there is a surplus production of pig-iron and of certain other products in the production of which India has special advantages, and this surplus is exported.

In the past Japan has been by far the best customer for Indian pig-iron, but her demand has recently declined,³

¹ The first year of the full working of the 'Greater Extensions'.

² Including 12,000 tons of pig-iron and scrap, imports of which are now negligible.

³ For a discussion of the position of the Japanese iron and steel industry and its raw material requirement see pp. 135 et seq. in Chapter II.

whilst the United Kingdom is taking increased quantities both of pig-iron and of steel bars. This latter development may be attributed partly to the 'Supplementary Agreement' attached to the Ottawa Agreement.¹

It has already been mentioned that the steel industry was the first to receive protection. During and immediately after the War, Tata's made good profits, but when depression came in 1921 prices fell and the very existence of the company was threatened. The Tariff Board recommended duties on a large variety of goods, and bounties for others. These were imposed by the Steel Industry (Protection) Act of 1924. The value of the protection afforded was, however, almost immediately undermined by the sudden rise in the sterling value of the rupee. The Tariff Board recommended almost doubling the duties, but the Government preferred to grant bounties on production.

In 1927 the position was again reviewed. The bounties were abolished and new duties imposed at somewhat lower rates to last for seven years. There were, in most cases, additional duties on non-British goods. As in the case of cotton piece-goods, the preference was imposed for economic reasons, that is, in order to admit goods urgently needed in India, which happen to be those produced in England, at a minimum cost to the consumer, while penalizing the cheaper European goods, which compete more directly with home products. Power was given to the Government to vary these duties, should imports come in at abnormally low prices. The preference has assisted British goods, but since 1929 low-priced goods, irrespective of quality, have tended to oust higher-priced British goods. In 1932-3 the United Kingdom supplied 43 per cent.,² Belgium 31.9 per cent., and Germany 6.7 per cent. of total imports, but in 1933-4 the British share rose to 57 per cent.

At Ottawa the question of preference on protected iron and steel goods was deferred pending the report of the

¹ Cf. p. 266 above. Also *Report on the working of the scheme of Preferences*, p. 109.

² Compared with 59.8 per cent. in 1913-14.

Tariff Board, but a 10 per cent. preference was granted on unprotected items, and the Supplementary Agreement provided, as already stated, for the continued free entry of pig-iron and steel, in return for concessions on British galvanized sheets.

The Tariff Board reported in 1934, and legislation has been passed extending protection until 1941, revising the duties in force,¹ but maintaining the preferential principle. The report also made recommendations for the reorganization of the industry along the lines of specialization and standardization. It concluded that the Indian industry had made substantial progress, despite the depression, and had effected satisfactory reductions in cost. It estimated that the share of the Indian market for steel goods obtained by the Tata Iron and Steel Company had risen since the inquiry of 1927 from 30 per cent. to 72 per cent.

It may be concluded that the steel industry, although still requiring moderate protection, is one of India's most promising and progressive industries, and that in the future India may become one of the chief exporters—if not the greatest exporter in the world—of certain types of iron and steel products.

(d) Characteristics and Problems of Industrial Labour

Certain characteristics of industrial labour, connected with the low standard and primitive conditions of life of the classes from which such workers are recruited, are common to most Eastern countries. But there are important differences between the various Eastern countries themselves in regard to labour conditions generally and to the problems which affect the supply and efficiency of labour, and which determine labour costs per unit of output. (Industrial organization in any one country is intimately connected with the relative cost of capital and labour, whilst the type of machinery used and rate at which it is worked depend to a great extent on the outlook, experience, and efficiency of the labour force in that country.)

¹ Some duties have been reduced, but preference has been increased.

In India the standard of life of the classes from which industrial labour is recruited, and consequently industrial wage rates also, are extremely low according to Western ideas. But efficiency and output per head are also far below Western and Japanese standards, a state of affairs not unconnected with the prevalence of illiteracy among Indian workers. This renders labour costs higher than might be supposed from a mere comparison of wages, and favours a primitive type of industrial organization, involving incidentally much waste of labour. No accurate methods of comparing the standard of life and efficiency of Indian and other workers have yet been devised. All, therefore, that can be done is to describe Indian conditions and problems in general terms, and merely to allude to certain rough comparative estimates.

According to the census of 1931 there were $3\frac{1}{2}$ millions employed in organized industrial establishments at that date, of whom only $1\frac{1}{2}$ million came under the Factory Acts. This compares with 6.2 million industrial workers (23.7 per cent. of all occupied persons) in Japan in 1929, of whom 4.7 millions were employed in organized industries—actually more than in India, despite the fact that India has a population of 352.8 millions as compared with only 64.4 millions in Japan—whilst over 2 millions are subject to the Factory Acts. There are no reliable figures for China, but it has been estimated that in 1929 between 1.2 and 1.4 millions were engaged in organized industries. In all three countries the textiles predominate; these find employment for about 1 million workers in organized concerns in both India and Japan, and about half a million in China.

In India, as in both the other oriental countries, recruits are obtained from rural areas, sometimes from a considerable distance; only in one or two large centres, such as Bombay and Calcutta, is there even the nucleus of a permanent class of industrial wage-earners. The industrial worker is essentially 'an agriculturist at heart', and retains contact with his village, where he usually leaves his wife and children and to which he returns periodically.

This fact accounts largely for the heavy labour turnover in factories, the difficulty in increasing efficiency by welfare work or higher wages, and for some of the extremely bad conditions of life in large urban centres including the lack of home-life and the immorality due to the excess of males over females. The industrial recruit is a temporary sojourner in a strange land, often in debt from the start, and he usually shares a single-room dwelling with several other individuals or even families.¹ But as recruits come from the least fortunate classes of rural dwellers, workers being 'pushed, not pulled' to the cities, even the appalling conditions of life and low wages are, on balance, an improvement in comparison with what can be obtained in the areas of recruitment.² Attempts have been made by Improvement Trusts, philanthropic bodies, co-operative societies, and certain employees to provide working-class dwellings, but have not been of a nature and on a sufficient scale to provide any real solution for the problem.³

Nevertheless the link with the village has certain advantages which, in the opinion of the Royal Commission on Labour in India, outweigh the disadvantages. The periodic visits to his own village help to maintain the health and spirits of the labourer, and the possibility of returning home gives him a stronger position during periods of depression or in case of a dispute. The Commission recommends that the link with the village should be maintained and regularized by the grant of regular 'leave', after which the worker should return to his former employer. In this way a more permanent labour force could be built up, without losing the advantages of the present system.

The 'push' from rural areas has recently been accen-

¹ The overcrowding, lack of sanitation, and scarcity of water, &c., are appalling in urban areas. In Bombay in 1921, 66 per cent. of the total and 97 per cent. of the working-class population lived in one-room dwellings with 5 to 9 persons per room.

² It would be more accurate to say that the real wages of industrial workers are higher, but that conditions of life are more disagreeable and unhealthy, especially for women and children.

³ Cf. Gupta, *Labour and Housing in India*, 1930.

tuated by the terrible rural distress due to the fall in prices, and to the growing number of persons divorced from the land and dependent on wages as agricultural or casual labourers. Unfortunately industrial unemployment has appeared simultaneously for the first time in India, so that the workers have been doubly hit by the depression.

The great bulk of industrial labour in India, in the textiles as well as in other occupations, consists of adult male labour, as contrasted with the preponderance of women and children in China and Japan, especially in the cotton industry. This fact makes the undoubtedly greater efficiency of the Japanese textile workers all the more surprising, especially as the Japanese girl workers seldom remain more than 3-4 years at the mills. In India only one-sixth of the factory workers are females as compared with over 50 per cent. in Japan,¹ and only 1.9 per cent. are children (of 12-15 years, and these are mostly males) as compared with 10.2 per cent. in Japan. The proportion of women and children employed in unregulated concerns, where conditions are particularly bad, is unfortunately considerably greater.

It is impossible to generalize about working conditions, wages, and the standard of life, as there are enormous variations from area to area and from industry to industry, but certain tentative statements may be made.

It is universally agreed that the standard of life of the masses in India is extraordinarily low, and that millions obtain only the barest necessities of life. Wages cannot be usefully compared owing to the differences in the purchasing power of money, in the wage systems, and in tastes and needs of the workers. In India, as in Japan, wages are paid only partly in money, a considerable part consisting in concessions or payments in kind, such as free or cheap housing accommodation and food at reduced prices. In addition, various bonuses or special payments are made from time to time. In Japan the dormitory system prevalent in the cotton industry makes comparison particularly difficult. It can, however, be said that a series

¹ Over 80 per cent. in the textiles.

of special inquiries into the budgets of industrial workers supports the view that earnings are definitely higher in Japan than in India, and in India than in China.¹

Working conditions in India vary as greatly as wages and the standard of life. They are best in the larger factories, less good in the seasonal and smaller factories, and worst of all in the unregulated factories and workshops, where child labour is still seriously abused.² Some factories have up-to-date, well-fenced machinery and undertake considerable welfare work, whilst others are very backward and merely comply with the legal requirements. There is little, if anything, to compare with the 'model' factories of Japan. Conditions of work have improved recently, especially since the Factory Act of 1922. The Whitley Commission³ concluded that during the first thirty years of this century, that is, until the onset of the present depression, there was also a marked improvement in earnings and conditions of life, deplorable though those still are.

Industrial legislation started relatively early in India, the first Factory Act being passed in 1881. This limited the age of employment of children, provided for the appointment of inspectors, and laid down regulations for sanitation and the protection of machinery. Legislation originally received stimulus from fear of 'Indian competition' in Lancashire, but when information became available as to the conditions of life and work, the movement was based upon honest sympathy and humanity in both England and India. The important Act of 1911 limited the hours of adult males as well as of women and children. During the War exemptions were freely granted to allow for night work and extended hours, but afterwards, especially after the International Labour Conference at Washington in

¹ This conclusion follows mainly from a comparison of the percentage expenditure upon food.

² Children may not be employed in mines under 13 years or in factories subject to legislation under 12 years, but children of only 5 to 6 years are to be found in unregulated workshops.

³ *Report of the Royal Commission on Labour in India*, 1931, Cmd. 3883.

1919,¹ the need for further legislation and stricter administration was realized, and resulted in the Factory Act of 1922, the ratification by India of the International Hours Convention,² and the Mines Act of 1923. This last Act prohibited the employment underground of children under 13 years of age, limited adult hours of work to 60 per week for surface workers and 54 for underground workers, and led to an order by which from 1929 onwards women's work underground is being gradually reduced and will finally cease in 1939. In 1928 a daily limit of 12 hours was imposed.

Thus in India, as in Japan and China, the International Labour Organization proved a turning-point in industrial legislation, and has had a great psychological influence. National pride has been touched, and public opinion tends to favour efforts to level up Eastern and Western conditions.

The Act of 1922, with minor amendments, remained in force until January 1st, 1935, when the Consolidating Act of 1934 replaced all former factory legislation. The Act of 1922 fixed a maximum of 60 hours per week and 11 per day, exclusive of one hour's compulsory rest interval, for adult men and women, and a maximum of 6 hours for children (of 12 to 15 years of age). The Act of 1934 reduces hours to 54 per week and 10 per day, except in seasonal factories (60 hours per week and 11 hours per day for males). This compares with 11 hours per day, including 1 hour's rest, in Japan, for women and children (of 14 to 16 years). But in Japan a certain amount of overtime is permitted even for women and children, and men's hours are unregulated.

Until 1926³ Japanese legislation was less strict than Indian, and gave Japan a competitive advantage. At the present time, however, Japanese regulations for women

¹ India is represented on the Council of the International Labour Office as one of the eight chief industrial Powers.

² This convention has not yet been ratified by either Japan or China. India has now ratified 13 of the 33 conventions adopted by the International Labour Conference at its sixteen sessions between 1919 and 1932. International Labour Office, *Industrial and Labour Information*, Jan. 7th, 1935.

³ In certain respects until 1929 or 1931.

and children (but not for men) are very similar, although it is frequently asserted that the law is not so well enforced in Japan, especially in factories outside the large cities. In practice, the actual hours worked are usually less than the maximum hours permitted, and it is of course the former that matter. In India a 54-hour week was common even before 1935, whilst a substantial number of firms, especially in the heavy industries, have a 48-hour week. The textiles, however, until 1935 normally worked the full 60-hour week, and the shift system is seldom used. Japan undoubtedly gains a considerable competitive advantage from her shift system, and from the fact that she employs a much larger proportion of young girls.

The recent Factory Act arose out of the findings and recommendations of the Royal Commission on Labour in India, whose chief recommendations were that hours should be reduced; that certain essential regulations should be extended to premises at present unregulated; that the law should be more strictly enforced in seasonal factories; that inspection should be improved, and that the labour functions of the sardars, jobbers, &c., should be eliminated.

The legislation described above refers only to British India. Most of the Indian States have some factory legislation, but very few (Mysore is one of the exceptions) have as high a standard as British India. Many have provisions similar to the British Indian Act of 1911. The growing disparity between legislation in British India and the Indian States, besides being intrinsically undesirable, offers a direct inducement to the establishment of factories in Indian States rather than in British India.

The Indian Trade Union movement started during the last quarter of the nineteenth century in connexion with the agitation for factory legislation, but did not take strong root until after the War, when there was a period of great unrest among industrial workers. Since then the movement has gained in strength, and has helped to secure important concessions for the workers, especially in the Bombay Presidency. Its great weaknesses have been the transitory nature of many of the Unions, the lack of work-

ing-class leaders, and the lack of co-ordination. A Trades Union Congress was founded in 1920, but since then has split into several sections. The movement has not been opposed by the Government, and the Trade Union Act of 1926 provides for the voluntary registration of Unions and for substantial protection as regards civil and criminal liabilities for registered Unions and their members. About 130 Unions, with a membership of 235,000, had registered in 1931-2.¹ Transport workers are the best organized, textile workers (except in Madras and Ahmedabad) being surprisingly backward. The Trade Disputes Act of 1929 and the Workmen's Compensation Act of 1923 are other examples of recent labour legislation, but no steps have yet been taken to introduce social insurance of any type.

As has already been said when dealing with the labour element in industrial production generally, comparisons of labour efficiency, like those of standards of living, are not at present obtainable. But although it is impossible to measure the comparative efficiency of labour directly, owing to differences in processes adopted, organization, machinery, and quality of the raw materials used, all authorities agree that the efficiency of the Indian industrial worker is low, much lower than that of the Japanese, for example.

It has been calculated that on an average 30 to 33 operatives are required per 1,000 spindles (for all counts averaging 20's) in an Indian mill, as compared with 18 in a Japanese mill; and that in ring-frame spinning a competent tenter attends two sides of a ring frame in Japan, but in India and China only one side. Moreover, the output per hour per spindle and the number of looms tended per operative are less in India than in Lancashire or Japan. Definite figures have been suggested by various authorities on the matter,² but are not quoted here on account of their incompleteness and the difficulty of obtaining exactly comparable conditions. Nevertheless, all authorities agree that India is at a disadvantage in this respect. It may be added that great opposition has been raised to efforts to

¹ Only about 1.5 per cent. of the registered membership is female.

² e.g. Pearse, *The Indian Cotton Industry*, 1930; and Lokanathan, op. cit.

get weavers to attend more looms. In coal-mining and iron and steel production a similar state of affairs exists.

Many explanations have been advanced to account for the low standards of output and of efficiency of Indian workers. They include the heavy labour turnover and irregular attendance, the workers' ignorance and lack of familiarity with machinery and labour-saving appliances, and the general slackness, poor physique, and lack of initiative. Undoubtedly there is at present in India the same vicious circle which we have seen existing in China—the low wages and standard of life leading to ill health, irregularity, and inefficiency, and inefficiency perpetuating low wages. In addition, slack discipline and bad organization reduce output per head. Due weight must also be given to India's climatic disadvantages, which have their effect upon the energy of managers and salaried workers as well as of manual labour, and which in some parts at least predisposes to ill health.

Finally a few words may be said about industrialization and the population problem. It is well known that India, like China and Japan, is still at a stage characterized by high birth, death, and sickness rates. The Indian population has probably more than trebled since the early nineteenth century, and increased from 318.9 to 352.8 millions between 1921 and 1931 (i.e. by 10.6 per cent.). (It is generally agreed that there is a tendency for any improvement in production to lead at present to a proportionate, or at least closely corresponding, increase in numbers, so that economic improvement results in keeping alive larger numbers, rather than in raising the standard of life.) The population problem is undoubtedly the crux of the problem of poverty, and although not so persistently brought to the fore in relation to India as in relation to Japan, is perhaps no less vital for the former than for the latter.

§ 3. INDIA'S INDUSTRIAL FUTURE

(a) *India's Competitive Position and Industrial Potentialities*

Industrialization has up to the present been slow and tentative in India. Progress has been greatest in the home

market, and even here protective tariffs have proved essential. It is therefore still questionable whether or not India is on the path towards far-going industrialization. Is it merely a question of time before she treads the Western path, or are there certain inherent factors, physical, racial, or social, which will necessarily limit her industrial advance? To what extent and in what directions will she compete in foreign markets? What opportunities will her own markets offer to countries exporting manufactured goods?

In addition to the defects already discussed in the spheres of organization, finance, and labour supply which have restricted industrialization in the past, there have been other limiting factors of a more general character. The mere size and vast population of the 'sub-continent of India' have made the problem of introducing modern methods more formidable than in a small and compact country like Japan. The exceptional inertia, arising from the social and political systems and institutions peculiar to India, has also acted as a brake on progress. In particular the existence of an alien government has led to suspicion of, and at the same time to undue dependence upon, governmental action and leadership. Nor must so purely physical an influence as that of climate be overlooked. The effect of the tropical climate prevailing over the greater part of India not only reduces human labour efficiency, but is said to be often detrimental to the smooth running of machines and of certain important manufacturing processes such as the spinning of vegetable fibres. From the point of view of industrialization, India ranks high in comparison with other countries subject to similar climatic conditions, but that these conditions are a strong limiting factor should be kept well in mind.

On the other side of the picture India, like Japan but unlike China, already possesses a high degree of economic unity, and modern facilities for communication and transport. She is well situated as regards natural resources, having plentiful supplies of the raw materials needed by her chief industries such as cotton, jute, and iron ore, as

well as good sources of motive-power, although her coal and mineral oil have the disadvantage of being highly localized, and the generation of hydro-electric energy is still limited and expensive in comparison with certain other countries, including Japan. In addition it is clear that the articulate classes are overwhelmingly favourable to industrialization.

The trend of industrial development in India and in Japan is likely to be altogether different. India's large area and varied resources render her potentially capable of developing a 'balanced economy' like that of the U.S.A., that is of becoming self-sufficing as regards foodstuffs, primary minerals, and industrial products, with an immense home market for manufactures, provided only that the standard of life can be raised. Japan is dependent upon imports of various raw materials and foodstuffs, which means that—if income and population are to continue to expand—she will be bound to export increasing quantities of manufactured goods. The question is, what will be the reactions on industry and trade if this capacity on India's part to develop a 'balanced economy' becomes a realized fact?

Trade statistics show that India already is tending to self-sufficiency as regards a number of goods previously imported. The outstanding example is cotton piece-goods, whilst the development of the iron and steel, engineering, matches, cement, and sugar industries points in the same direction. Sir George Schuster has drawn attention to the remarkable progress made in certain industries since 1928, despite the depression.¹ For instance the production of cotton piece-goods has increased 41 per cent., as compared with 34 per cent. in Japan and with a big decline in most other competing countries. Steel production has increased 75 per cent. as compared with a rise of 55 per cent. in Japan, and a decline of 54 per cent. in U.S.A., 30 per cent. in France, and 20 per cent. in Great Britain. In the case of cement, whereas in 1924 India produced 263,746 out of the total consumption of 387,932 tons,

¹ Indian Finance Member's Budget Speech, 1934-5.

in 1933 she produced the much higher proportion of 625,860 out of 689,515.

India may also before long satisfy her own needs in paper, glass, soap, and hardware, while a number of new minor industries, some quite modern in type, have sprung up recently, including electric lamps and appliances, rubber tyres, water-softening plant, cooking stoves, asbestos, cement products, paints and enamels.¹ The situation with regard to chemicals is more doubtful. India has the requisite resources for large-scale production of many heavy chemicals, but efforts to stimulate their development have signally failed.²

To deduce from this evidence of increasing self-sufficiency a probable decline in the importance of India as a market for manufactures as a whole would be an erroneous conclusion. India's imports still consist chiefly of a great variety of manufactured goods, and the trend has been towards high-quality goods, including machinery, plant, mill accessories, motor vehicles, instruments and apparatus, chemicals, and other articles necessary for increased industrial production within India. India remains backward in the production of high-quality goods, and meanwhile the very act of industrialization will create new demands. Hence, as India's productive powers overtake her own demand in certain categories of goods, new needs will develop in other directions. Moreover, should the standard of life be raised even slightly this would involve a huge new demand for the conventional necessities and luxuries of civilized life.

The great decline in Great Britain's share of the Indian market may easily create an erroneous impression of a decrease of the Indian market as a whole. The change has been, however, in direction rather than volume and the following table shows the important alteration in the distribution of India's foreign trade from the pre-war period to the present time:

¹ Ibid.

² A number of protective duties on chemicals, imposed in 1931, were removed in 1933, as no steps had been taken towards 'rationalization'.

*Distribution of Indian Trade**

(percentages)

IMPORTS

Countries	Pre-war	War	Post-war					
	1909-11 Average	1914-19 Average	1919-24 Average	1925-9 Average	1930-1	1931-2	1932-3	1933-4
U.K.	63	56	58	49	37	36	37	41
Rest of British Empire . . .	7	9	7	8	9	9	8	9
U.S.A.	3	7	8	7	9	10	9	6
Japan	2	10	7	7	9	11	16	14
Java	6	8	7	6	6	4	3	2
Germany . . .	6	1	3	6	7	8	8	8
Other countries .	13	9	12	17	23	22	19	20

EXPORTS

U.K.	25	31	24	25	21	28	28	32
Rest of British Empire . . .	16	21	17	14	14	17	18	15
U.S.A.	8	12	12	11	12	9	7	10
Japan	8	11	13	12	10	9	10	9
France	7	4	5	5	5	5	5	5
Germany . . .	10	1	5	8	9	6	6	7
Other countries .	26	20	24	25	29	26	26	22

* Trade in merchandise, on private account only.

War conditions led, as the figures show, to a wide replacement of European by Japanese and American goods, and even when the relative importance of Japan somewhat declined Britain continued to lose her former lion's share of the Indian market, though Germany tended to regain her pre-war position. Instead of a great excess of exports to India, by 1931-2 the trade in both directions had become practically equal.¹ The loss of markets for British goods in India was due primarily to the continuous decline in cotton goods, but Great Britain's share of most of India's other imports also declined. What Great Britain lost, other countries gained. Even in the cotton goods trade this is true to a certain extent. Until 1929 the Indian market for manufactures as a whole steadily increased, and even to-day, despite the depression, the quantity of many manufactured imports is greater than before the War. For instance, imports of chemicals were in 1933-4 three times their pre-war quantity and value, whilst imports of motor-cars increased from 2,880 in 1913-14 to 19,567 in 1928-9.² The decline in Great

¹ i.e. Rs. 47 crores.² 9,759 in 1933-4.

Britain's share of the Indian market has now at last been checked, and rose from 35.5 per cent. in 1931-2 to 36.8 per cent. in 1932-3, and 41.2 per cent. in 1933-4.¹

The table set forth below illustrates changes since 1913-14 in the sources of supply of the chief manufactured imports. These facts and figures support the view

*Changes in the source of supply of important
manufactured imports**

(Percentages, based on value)

		U.K.	U.S.A.	Germany	Japan	Belgium	Italy
Cotton manufactures	1913-14	90.1	0.4	2.1	1.8	..	..
	1932-33	53.5	1.3	0.3	37.9	0.1	0.9
Iron and steel goods	1913-14	69.9	2.6	14.5	..	..	..
	1932-33	51.1	1.2	8.6	0.7	24.2	..
Machinery	1913-14	89.8	3.3	5.6	..	..	..
	1932-33	74.1	11.8	10.2	0.4	3.7	..
Mechanical vehicles	1913-14	71.3	15.1	..	..	4.5	..
	1932-33	47.6	36.5	3.0	0.2	0.3	3.2
Instruments, &c.	1913-14	75.3	8.0	8.2	0.6	..	..
	1932-33	50.5	13.9	16.9	5.9	1.6	1.9
Chemicals	1913-14	74.7	0.3	12.4	1.5	..	5.2
	1932-33	51.6	5.4	14.9	4.9	..	5.6

* Department of Overseas Trade *Report on Prospects and Conditions of British Trade in India for 1932-33.*

that, provided the present depression does not continue indefinitely, the Indian market for manufactures as a whole is likely to increase, although the demand for particular articles may decline.

On the export side changes in the direction of trade have not been so striking. It may be noted that the shares of Britain and of the rest of the Empire tended to increase even before Ottawa. As to the composition of the export trade the percentage of manufactured and partly manufactured goods exported to total exports increased from 17 in 1904 and 23 during the pre-war period to 27 for the

¹ This may be partly attributable to the Ottawa Agreements, but the cessation of the boycotting of British goods and the adherence of India to the 'sterling group' have been important factors.

post-war period and for 1929, declining slightly to 26 in 1930. The increase has been divided between a fairly large number of goods,¹ and at present only the jute, and to a lesser extent the leather, industries cater primarily for export.

It can be concluded that, apart from the iron and steel industry, few Indian industries are likely to expand their overseas markets rapidly in the near future, but that the general tendency is towards the increased export of miscellaneous manufactures.

It will be useful from the point of view of this study to classify Indian trade with particular countries according to whether it is predominantly 'complementary' or 'competitive'. In general terms it can be said that Indian trade with Britain, with the rest of the Empire, and with the U.S.A. is predominantly complementary, while that with Japan, China, and continental Europe is largely competitive.

Great Britain sends chiefly high-quality goods to India which cannot at present be manufactured there. Even those, e.g. cotton piece-goods and steel goods, subject to protective duties are in the main of a different quality from that of home products. In return she imports tea, raw and manufactured jute, oilseeds, hides and skins, pig-iron, and raw cotton. The United States is in a very similar position, though the actual commodities differ in relative importance. The Dominions take mainly jute goods, tea, and rice, sending in return manufactures, coal, &c. The tropical colonies, e.g. Ceylon, Malaya, tropical Africa, and the British West Indies, also have complementary trade; Ceylon and Malaya, for instance, send spices and other specialities, and take in return such products as rice, cotton, and jute goods, and tea; Kenya sends raw cotton, and takes cotton and jute goods.

On the other hand continental Europe sends chiefly cheap manufactures, which compete with those produced in India. The trade with China is also largely competitive, and has changed remarkably since the pre-war period. Whereas total imports from China have increased, exports

¹ Cf. p. 251 above for a list of the principal manufactured exports.

to China have notably declined. Before the War the chief exports to China were cotton yarn (about 50 per cent. of the total), jute goods, raw cotton, and tea, whilst China sent chiefly raw and manufactured silk. To-day Indian yarn exports to China have, as we have already seen in the chapter on Chinese industrialization, practically ceased, and India sends chiefly rice, raw cotton, and paraffin wax, receiving in return raw and manufactured silk, and cotton yarn. A large export of cotton yarn to China has therefore been replaced by a considerable import.

The outstanding example of competitive trade is, of course, that with Japan. The following table gives the chief items of trade before the War and in 1932-3:

*Trade Between India and Japan**

A. VALUE OF IMPORTS INTO INDIA FROM JAPAN

(In lakhs of rupees)

	<i>Pre-War Average</i>	1932-3	1933-4
<i>Cotton goods</i>			
Hosiery	65	61	72
Piece-goods	6	7,85	4,43
Yarn	6	1,61	95
Other types	2	12	8
1. Total cotton goods	80	10,19	6,18
2. Silk manufactures	1,31	2,01	2,11
3. Earthenware and porcelain	4	31	26
4. Boots and shoes . . . . .	..	31	32
5. Artificial silk goods . . . . .	..	2,70	1,56
Total imports	3,64	20,47	16,35

B. VALUE OF EXPORTS FROM INDIA TO JAPAN

1. Raw cotton	14,50	11,12	10,52
2. Rice	1,33	62	..
3. Iron and steel goods	15	52	66
4. Hides and skins (tanned or dressed)	12	20	21
5. Jute, raw and manufactured	21	47	38
Total exports	16,84	13,95	12,61

* Table prepared from the *Annual Review of the Trade of India*, 1933-4.

This table shows the immense increase of Japanese exports to India, despite the depression.¹ No less than 65 per cent. of the 1932-3 total consisted of cotton and artificial silk goods, whilst textiles in general, including silk goods, accounted for 75 per cent. Practically all the Japanese textiles sent to India, and a large proportion of the other goods, may be considered as competitive.² In fact Japan can supply India with an ever-widening range of cheap manufactures at prices at which Indian and European goods cannot, without very heavy protection, compete.

Finally it may be emphasized that the cotton industry is the Indian industry which at present chiefly affects international industrial competition, and which competes in international markets. The iron and steel industry, already important, is of still greater potential importance, as India may well become one of the chief exporters in the world of certain types of iron and steel products. In what proportion India's iron and steel products will prove competitive or complementary in relation to British products depends upon the extent to which the principle of Imperial specialization triumphs over that of national self-sufficiency.

(b) Political Factors affecting India's Industrial Future

It is impossible to discuss India's industrial future without reference to political factors. It is true that the extent of industrial development depends primarily upon the progress made in raising the standard of life of the masses, both the agriculturists and those in the cities, that the raising of their standards depends in turn upon radical changes in social habits and customs, and that these essential changes can be effected only by the people themselves

¹ Japanese exports to India were 50 per cent. greater in 1932-3 than in 1931-2, and reached their peak in the summer of 1932, just before the Indian duty on non-British piece-goods was raised to 75 per cent.

² Articles not in the table include glassware, hardware, haberdashery, apparel, toys, and instruments and apparatus; also paper, chemicals, umbrellas, rubber goods, cement.

and not by any outside ruling power. But although this is clearly the fundamental factor in the industrial outlook, it is equally true that political developments under the proposed new Constitution will largely shape future economic policy and, to some extent, economic conditions in the country, while external political relations, especially those with the United Kingdom and with the British Empire as a whole, will also play an important part.

This connexion between the political and the economic development of India is too vast, and the political future too undefined, to allow of more than a few generalizations, and all that will be attempted here is to indicate a few of the main political factors and problems likely to influence economic developments and policy. The discussion will proceed on the assumption that the proposals for reform at present before the British Parliament will be accepted in India and in England. Should this assumption not be fulfilled the situation would be so serious that economic, including industrial, development might be held up indefinitely.

Political conditions within the country, and consequently economic conditions and policy, will depend fundamentally upon the distribution of power between the various communities and classes.

It is proposed to extend the franchise and maintain communal electorates. But the franchise will still be limited to a comparatively small proportion of the population, and the fear has been expressed by some political leaders that the result will be inimical to the interests of the masses of the population, i.e. that the new Government will be more 'capitalistic' than the Government has been in the past. This may lead to increased unrest among industrial workers and possibly hinder the extension of social services of labour legislation. The peasants, also, may be adversely affected, but on the other hand it is quite possible that a 'country party' may arise and counter-balance *zamindari* interests.

Even if at least as much weight is given in the future as in the past to the interests of the masses, the actual policy

pursued—as regards both objectives and methods—will still depend on the distribution of power and the nature of the political parties which develop.

It is difficult to predict what will be the result of the maintenance of communal electorates on the development of political parties. Will parties develop with platforms based on broad principles, giving considerable weight to economic matters, or will the parties be based on communal divisions, thus splitting up between the parties the advocates of particular types of economic policy? Will it be possible to arrange for co-operation in economic matters, so that an economic programme can be passed and carried out without unreasonable delay? Or will parties develop simply based on personal leadership?

Even if some method of carrying out a definite economic programme can be devised, the question still remains—what will be the relative power of different, and in some cases opposed, economic interests and classes? There is, for instance, an obvious cleavage of interests between agriculturists and consumers, on the one hand, and the great merchants and industrialists, on the other hand, on the question of tariffs. If the latter obtain predominant power they may inaugurate a policy of extreme economic nationalism, regardless of the cost to consumers. A similar cleavage might develop with regard to currency policy. It has been the Bombay merchants and industrialists who have, in the past, pressed for a return to the 1s. 4d. rupee. It may be noted that the Reserve Bank Act repeats the previously existing regulations with regard to the exchange, maintaining the 1s. 6d. rupee, but obviously this policy might be changed.

Until the basis of party formation and the comparative strength of the parties formed become clearer, any attempt to predict the trend of economic policy can be little more than guess-work. The opinion has been expressed already that industrialization will be the goal pursued, but the rate and methods adopted depend on the comparative strength of the various parties and also on the financial situation. One of the chief factors limiting governmental

action in the industrial sphere in the past has been lack of revenue, and if the new Constitution leads to a reduction of taxation, less efficient or less economic administration, and any reduction in the security of foreign or Indian capital, the financial problem will be greatly aggravated. On the other hand it is conceivable that self-government will make possible new economies and the tapping of new sources of revenue. It is also conceivable that self-government will lead to social reforms tending to promote economic enterprise which an alien government would never dare to introduce.

Fears have been expressed that federation will increase the expense of civil government, and hence necessitate increased taxation. It has, however, been estimated that the extra expense involved will amount to only about £1½ million per annum. Meanwhile a federal system, with sufficient central authority to be able to plan on a national basis for the raising of the Indian standard of life, would seem to be a pre-requisite for any substantial improvement in the condition and efficiency of the industrial worker and hence of industrial output.

Finally there is the important question of future relations between India, the United Kingdom, and the rest of the Empire. Recent events leading to closer co-operation between India, Lancashire, and other parts of the Empire and the new Indo-British Trade Agreement have been described, and it has been seen that the trend of trade has already been affected by the policy of Imperial preference. A trade agreement with Burma is to be a necessary preliminary to the separation of Burma. Much greater developments may be expected in the future if the policy is pursued with vigour. A recent suggestion is that a broader trade mission, following up the Lancashire mission, should shortly proceed to India.

Nevertheless great objections have been raised in India against Imperial preference and the Indo-British Trade Agreement, and the possibility of the abrogation of the Ottawa Agreement, and the raising of tariffs against British goods, must not be overlooked.

The position of foreign capital and enterprise in India is also uncertain. Many Indians favour the imposition of restrictions on foreign capital and enterprise.¹

It is of course true that the proposed Constitution for India includes clauses to prevent discrimination against British subjects and companies, but it is also true that even without the actual repeal of these commercial safeguards it would be possible to make things 'uncomfortable' for British traders. The success of boycotting at certain periods in the past is sufficient to prove that in the last resort the only real safeguard lies not 'in a paragraph of any Constitution, but in an active policy of co-operation and goodwill'.² Any reaction against the present policy would not only affect British trade and traders adversely, but would also tend to deprive India of the use of imported capital, and to decrease her chief export market. Provided that there is no question of exploitation, the use of British capital on easy terms, the presence of experienced European entrepreneurs, and the continuance of well-established businesses are obviously in India's interest. Unfortunately there is reason to suppose that the interdependence of British and Indian economic interests is still insufficiently realized, and much remains to be done to bring home to the public the great extent of the common interests of the two countries.

(c) *Conclusions*

The industrial position of India and the chief factors affecting industrial development have now been reviewed. Defects have been noted in a number of spheres, but it has been pointed out that many of these are remediable, given political and economic stability, and increased co-operation between the various interests and classes concerned. The present economic policy tends to encourage Imperial co-operation, and also to increase the security of industrial enterprises, both foreign and Indian, and hence the confidence of investors. Although India will for long need

¹ Note for instance the proposed (but at the time rejected) reservation of coastal shipping to Indian companies.

² *The Times*, July 24th, 1934.

capital from abroad, that capital should be forthcoming on reasonable terms provided that political and social conditions are not upset. The new Reserve Bank and credit policy should help to co-ordinate India's various financial agencies and develop their functions along sound lines. It may also be suggested that there are signs that the depression has passed its nadir, so that if only means can be found of re-establishing freer international exchange, a revival of trade may be expected. India is in an exceptionally good position for taking advantage of any such revival. Amongst the signs of recovery may be included the recent relative rise in the level of prices of Indian exports as compared with imports, the fact that consumption of necessities has been maintained, and finally a sound financial position.

With regard to the last, Sir George Schuster in his last Budget speech pointed out that in spite of the depression the Budget has been balanced, without resort to inflationary borrowing, by increased taxation and decreased expenditure. During the last two years some provision has been made for the reduction of debt, whilst for 1934-5 a surplus of Rs. 327 lakhs is expected. The Finance Member maintains that the corner has already been turned, and that it will shortly be possible to restart capital and constructive expenditure. Indeed certain steps have already been taken in this direction, and an economic programme has been drawn up, and is about to be put into force. Indian Trade Commissioners in foreign centres have already been decided upon, and revision of the company and insurance laws has been promised. Whatever may be thought about the advisability of this type of 'sound finance', the fact remains that, if the corner has been turned, the disadvantages will have been suffered in the past, and that India will in the future be in a position either to spend an increasing revenue on 'nation-building objects' or to reduce taxation, or both, instead of having to repay loans.¹

¹ Compare this with Japan's position. In 1933-4 she had a deficit covered by loans of over 1,000 million yen, and in 1934-5 is borrowing some 800 million yen to cover the current deficit.

On the other hand, the reforms and possible developments indicated will all take time. Not only has there been no rapid industrialization in the past, but there is little likelihood of any rapid stride in that direction in the future. Industrial progress in India depends fundamentally upon increasing the home market by a gradual rise in the standard of life, and on improving organization, management, and the efficiency of labour by patient education and training. Protection of home industries by means of tariffs will undoubtedly continue to be necessary.

The only direction in which rapid advance in competitive power in external markets seems likely is in the lower stages of the iron and steel industry, although a gradual increase in the export of miscellaneous manufactures is also probable. In India, as elsewhere, industrial progress cannot be divorced from political relations, and the great need is for the restitution of freer international exchange.

CHAPTER V

GREAT BRITAIN

§ 1. HISTORICAL NOTE ON BRITISH INDUSTRIAL DEVELOPMENT IN THE NINETEENTH CENTURY

THE parts of this book dealing with Japan, China, and India have in each case been prefaced by a short historical sketch, the inclusion of which appeared called for by the relative lack of knowledge possessed in the West of oriental industrial conditions. In coming to Great Britain, it is neither practicable on account of the space required, nor necessary for the instruction of the average reader, to repeat this procedure. It seems nevertheless desirable, both as a background for the following section of this chapter, and also to emphasize the difference in early environment between British industrialization and the eastern industrializations dealt with in previous chapters, to indicate briefly some of the major features of British economic development during the nineteenth century.

Great Britain's industrial structure has its roots in the series of changes in the eighteenth and nineteenth centuries usually comprehended in the title 'the Industrial Revolution'. These changes, which have since become general in western countries, were at first confined to Great Britain—an important fact in determining her economic evolution all through the last century. (By her early development of machinery and of a new type of industrial organization, Great Britain forestalled other nations in establishing modern industry and the large-scale export of manufactures.) The cotton industry was the first industry to be organized under the new methods and it soon assumed international importance. As we have seen in an earlier chapter, the growth of the Lancashire power looms robbed India more than a century ago of her traditional export trade in cotton yarn and cloth, in spite of a difference in the price of labour exceeding that of to-day.¹

¹ To quote Charles Babbage, writing of conditions in 1832: 'at

Various advantages can be singled out to explain the remarkably long start which England obtained in the movement towards modern industrialism. Some were of temporary effect, others have endured to the present time. The ground was prepared, to begin with, by a long tradition of overseas trading, which in turn brought about a substantial accumulation of 'free' capital derived from the profits of trade and ready to flow into new fields of development. Political and social conditions in Great Britain were, moreover, such as to give an unusual degree of freedom to individual enterprise, financial as well as industrial, and the spirit of commercial adventure was itself markedly strong. Lastly factory development was made easy by the possession of ample supplies of the coal needed for the generation of power and the smelting of metals.

Assisted by these and not a few other aids, British industrial development progressed at a rapid rate. Iron production, for instance, which in the middle of the eighteenth century amounted only to seventeen thousand tons a year, increased between 1806 and 1844 from a quarter of a million to nearly a million and a half, while shipments of British coal grew from four million tons in 1819 to nearly treble this figure at the middle of the century. Foreign trade developed in harmony. Taking the eighteen years from 1831—roughly speaking, that is, from the beginning of the 'Industrial Revolution'—we find total British exports growing from £37 million to £64 million, and cotton exports alone from £17 million to £26 million. This industrialization involved for Great Britain a change of a radical nature in the character of her economy—a point to which special reference will be made in the following section—in the form of a movement away from self-sufficiency towards dependence on foreign trade for the supply of a large proportion of the country's requirements of foodstuffs. Thus the average annual imports of wheat in the decade 1840-50 were four times as great as in the decade of

Calicut . . . the price of labour is one-seventh of that in England, yet the market is supplied from British looms.' (*The Economy of Manufactures*, p. 4.)

forty years before (1800-10) though population in the interval had not so much as doubled. Accordingly Great Britain began to incline to an 'international', as opposed to a national, economic system, since her industrialization in the face of a world still predominantly agricultural presupposed a free flow of goods, raw materials, and food in return for exported manufactures.

The extent to which Great Britain became 'the workshop of the world' can be shown by a glance at the range and relative importance of markets to which British goods were shipped in the middle of last century:

North Europe	22	per cent.
South Europe	17	"
Asia	17	"
Africa	2.5	"
U.S.A.	18	"
North America (other than the U.S.A.) and		
West Indies	7	"
Central and South America	11	"
Other regions	5.5	"
	100.0	"

Such industrial supremacy could not last unchallenged and in the second half of the century industrial competitors were rapidly coming to the fore. In Germany the admonitions of List, who denounced Britain's free-trade 'cosmopolitanism' as designed to appropriate industrial benefits to herself, leaving the rest of the world on the low standards of agriculture, and who advocated the stimulation of industries in Germany under tariff protection, were followed by an era of State-aided industrial development during the Bismarck régime; the United States of America went through a belated industrial revolution, characterized and assisted by the rapid development of railways, while France also embarked on industrial expansion.

The decade 1860-70 may be taken as approximately the high-water mark of British industrial supremacy. The report of the Royal Commission on the Depression in Trade and Industry of 1886 already contained recognition

of the fact that the position of the past could only be maintained by means of far greater efforts than had been necessary heretofore, and in the last period of the century we see a relative slowing up in the rate of progress of the British exporting trade with a simultaneous acceleration in that of her trade rivals. In the final decade, for instance, the index of British exports showed an average annual rise of 2.7 per cent. compared with an annual rise of 5.8 per cent. in the previous decade and of 6 per cent. over the last half of the nineteenth century. In the first year of the new century British exports stood at £282 million, German at £227 million, and French at £164 million.

✓ In competition with later arrivals in the field, Great Britain was handicapped by conditions arising partly from the very fact of her initial lead. Her fixed plant and settled organization represented a disadvantage when compared with the liberty enjoyed by countries unhampered by the past and able to profit both by the experience of others and by the most recent technical developments. The British economic and social structure had tended to crystallize, and the British asset of acquired manual skill was becoming offset by the results of scientific invention, of which Great Britain had no monopoly. Moreover, the free play of capitalism, which had assisted her industries at the start, was now becoming a characteristic rather of her rivals, reaction having taken place at home in the form of the growth of trade unionism and of collectivist legislation which—however necessary and desirable on other and more general grounds—deprived British industry of much of its earlier elasticity.

✓ This lack of elasticity was accentuated by the comparatively narrow range of manufactures exported from Great Britain. Based, as it was, on the exploitation of a limited number of basic raw materials, the British industrial system and British foreign trade owed their development mainly to a few dominant types of production. Textiles, the heavy industries, coal, iron, and steel, engineering, and shipbuilding combined to make up the major part of the British export trade, as the following figures for

stated periods before and after the turn of the century show:

British Exports

(In millions of £'s)

	1880		1900		1910	
		<i>per cent. of total</i>		<i>per cent. of total</i>		<i>per cent. of total</i>
Total exports	223.1	..	291.2	..	430.6	..
Cotton textiles	75.6	34.0	69.8	24.0	104.7	24.4
Wool textiles	21.8	9.3	23.8	8.2	35.0	8.1
Iron and Steel	28.4	12.7	31.6	10.9	43.0	10.0
Coal	8.4	3.8	38.6	13.3	37.8	8.8
Machinery	9.3	4.2	19.6	6.9	29.3	6.8
		64.0		63.3		58.1

This shows that, although the importance of these leading commodities relative to the total export trade was slightly on the decline, there was, just prior to the Great War, still a marked dependence upon the traditional manufactures of the Industrial Revolution.

A final factor to consider in tracing the rise and decline of the British export trade is foreign investment. Great Britain's importance as a foreign lender had an undoubted influence on her external trade in the second half of the nineteenth century. An international economic organization demanded a ready supply of capital for the development of new countries, and 'it was Great Britain . . . that displayed the greatest readiness to provide a steady flow of new capital by the reinvestment of profits, and to face the consequences of foreign investment both by accepting a growing volume of imports from the developing countries and by making the necessary readjustments in domestic economic organization'.¹ It was essential that she should find markets for her growing output of manufactures and sources of supply from which to draw food and raw materials, and the export of capital was closely linked to

¹ League of Nations, *World Economic Survey*, 1931-1932, p. 37.

these needs. The magnitude of her foreign investment is shown in the following table:¹

Average annual export of capital in millions of pounds sterling

1870-79	.	.	.	.	.	32.3
1880-89	.	.	.	.	.	42.5
1890-99	.	.	.	.	.	35.2
1900-1909	.	.	.	.	.	65.4
1910-13	.	.	.	.	.	189.7

Undoubtedly a great deal of this investment led to the placing of orders for goods from British manufacturers. Railway enterprise² in newly developing countries was an outstanding example of the cases in which British foreign investment was—to quote a leading authority—‘very largely represented by orders to British manufacturers of railway materials and rolling stock’.³

Since the Great War the character of foreign investment has changed. There has been a swing from long-term securities to short-dated loans, many of which became ‘frozen’ in the world depression. Meanwhile other countries had begun to lend freely. Perhaps most important of all, the former connexion between British loans and British exports has been weakened by economic nationalism in the countries concerned. Divergences of opinion exist, it is true, in regard to the extent to which trade follows foreign investment, but all these changes in relation to the export of British capital have probably had no small degree of influence upon the country’s export trade.

By the end then of the nineteenth century, Great Britain, while still the leading industrial exporting nation, and, by means of her financial organization, still the medium for transacting a very great part of the business of the world, saw the limitations to further development becoming increasingly plain. The first decade of the twentieth century

¹ Hobson, C. K., *The Export of Capital*, p. 219.

² Of the total British investment abroad outstanding in 1913, that in railways constituted 41 per cent. *World Economic Survey, 1931-1932*, p. 36.

³ Hobson, op. cit., pp. 7 and 15.

brought a phase of depression followed by a period of rising prices accompanied by much industrial unrest, and it then became even clearer that the easy prosperity of the nineteenth century had been definitely left behind. With the advent of the Great War, profoundly disturbing the whole economic structure and quickening adverse forces implicit indeed but only half felt before, a new era began for the British exporting industries through which we must trace their fortunes in the following section:

§ 2. POST-WAR CONDITIONS IN THE EXPORTING INDUSTRIES

Before picking up again the thread of events, attention may here be drawn to a point of fundamental importance in considering what her export industries mean to Great Britain. She and Japan are at the present time facing a vital economic problem which is fundamentally one and the same for both. The essential factor conditioning Japanese development is a rapidly growing population, to support which it is necessary to develop an export trade in manufactures. Great Britain has reached a further stage in the evolutionary process. She has developed a national economy on the basis of an export trade supporting a large population at a higher standard of life than would be possible if the country were self-contained. She is now presented with a decline in the export trade on which she has become dependent for the maintenance of this standard of living. The position, therefore, is that, although the population of Great Britain, unlike that of Japan, is now relatively stationary, the vital problem of 'subsistence' exists for her also. She must strive to maintain her population at its accustomed standard and this, in the opinion of most economists, can only be done by means of an active export trade enabling her to secure the necessary food and raw materials.

Unemployment, with which we shall deal later, is, of course, a prominent aspect of the problem, but in these introductory remarks it is well to lay stress on the fact that even increased employment, when confined to those

occupations which provide goods and services for domestic use, fails to compensate for a contraction in the export industries upon which the country depends for the means of paying for its essential imports.

To revert now to the position directly after the War, we find a state of affairs in the immediate post-war period which was one of general European recovery from war-time dislocation, followed by rapid industrial progress in the world generally. In 1925, which serves as a useful milestone in post-war economic development, the pre-war level of production in raw materials and foodstuffs had been regained, while industrial production, though it had not quite reached the pre-war maximum, was not less than the average of the last pre-war quinquennium.¹ The world's *per capita* production had increased, although not in a degree sufficient to maintain the pre-war trend. The position can be shown in tabular form:²

1925 as percentage of 1913

World population	105
World production—food	110
" " —raw materials	125
Quantum of world trade	107

The restitution of the pre-war level of production was not, however, the main problem of the period; the 'really difficult problems of the first post-war decade proved to be, not the increase of material production, but the balancing of effort and resources between countries and between industries, the reconstitution of trading relations, adjustments to the considerable shifts in income distribution caused by war debts and taxation, as well as to a greatly changed pattern of international indebtedness, and the rehabilitation of the world's badly damaged currency and banking systems'.³

World exports were rising, but the British share continued to decline, dropping from 14 per cent. of total world exports immediately prior to the War to 12 per cent. in 1925.

¹ Loveday, *Britain and World Trade*, pp. 23 and 28.

² *World Economic Survey*, op. cit., p. 23.

³ *Ibid.*, p. 22.

After 1925 the effect of the difficulties of industrial orientation and of international adjustment became accentuated and broke the even trend of development. World production, it is true, still continued to increase.¹ Progress was, however, no longer uniform. The comparative prosperity of industrial nations was not shared by agricultural nations and the fall in the prices of staples, later to become crucial, began to make itself felt. Nor were primary commodities the only category for which the demand had declined. A general change in demand of extreme importance for Great Britain and similar manufacturing countries had set in. The prosperous industries in these countries were mainly those supplying new types of commodity—such as electrical apparatus, motor vehicles, or artificial silk—while those supplying the older staple products—such as cotton, woollen, and iron and steel manufactures—found themselves in a depressed state.

The causes of this change in consumption demand were complex. An important factor was an alteration in the distribution of income, resulting in relatively greater spending power for wage-earners and especially unskilled workers, who as a class would be likely to spend a greater proportion of their income on goods for consumption and to save less than those classes of the community who previously had commanded a larger share of the distributed wealth. In consequence of this, the demand for the capital goods supplied by the heavy industries had a natural tendency to decline.² At the same time, as a result of scientific and technical developments, the type of the goods themselves was changing; artificial silk tended, for instance, to replace cotton and wool. These changes were reflected in the character of world trade where the proportion of trade in raw materials to the total trade decreased. Between 1925

¹ 1929 indices with 1925 as base (= 100) were: France 130, Germany 122, Poland 138, Canada 154, to take a few examples.

² Professor Pigou suggested in 1927 that this might be an important factor in modifying the normal scale of the heavy industries supplying capital goods. See *The Economic Position of Great Britain* (Royal Economic Society Memorandum No. 1), p. 10.

and 1929 the quantum of world trade in primary commodities rose by 15 per cent., while the increase in the trade in manufactured goods was double that figure, indicating the growing importance of secondary production. These changes in demand, affecting both goods and services, are regarded in some quarters as constituting the most radical breach with the pre-war economy of Great Britain.

As a leading producer of capital goods and of the older staples, Great Britain was one of the nations which suffered most from this changed character of demand. She had in addition her own peculiar problems. One of the most important changes precipitated by the War occurred when countries which had formerly been markets for British manufactures, finding themselves shut off from the usual source of supply, began to manufacture for themselves. A notable instance is cotton manufacture, which developed strongly in the East; other examples are the iron and steel industries, railway plant, and wool textiles. The Balfour Committee regarded this rise of manufacturing activity among old customers as being 'perhaps the most important permanent factor tending either to limit the volume or to modify the character of British export trade'. Thus in the period after the War Great Britain lost markets not only through changes in demand and the impoverishment of her customers, but also by the latter's emergence as rival producers themselves.

Several of Great Britain's chief export industries had, meanwhile, expanded unduly during the War. Because of war-time demand her heavy industries—mining, iron and steel production, shipbuilding, and engineering—had grown well beyond normal peace-time requirements.¹ In the case of the cotton industry there had been an excessive expansion already between the years 1907 and 1912, so

¹ Part of the expansion in the labour force in 1919 can, however, be attributed to the return of soldiers to their old occupations, supplementing the new recruits who had taken their place in industry. Thus, in coal-mining, the peak year of production was 1913, but the labour force was greater after the War than before it, largely for this reason.

that by 1913 there was a recognized surplus capacity and the contraction which followed during the War period represented a normal decline apart from the reaction from the exigencies of war. The expansion of the heavy industries, together with the contraction of others more suited to peace than war, are shown in the following table giving the numbers of workers attached to the various industries as recorded in the Census returns, and indicating also the pre-war trend for purposes of comparison:

Percentage changes in workers attached to various industries, 1901-21

	<i>Percentage increase + decrease - 1901-1911</i>	<i>Percentage increase + decrease - 1911-1921</i>
<i>Expanding Industries</i>		
Coal-mining	+36	+17
Chemicals	+47	+47
Metals, machines, and conveyances	+22	+40
Engineering and Shipbuilding . . . . .	..	+49
<i>Contracting Industries</i>		
Cotton	+11	- 5
Wool	+14	- 4
Agriculture . . . . .	..	-14
Building . . . . .	..	-12

These figures indicate that the hypertrophy of certain industries, resulting in an excess supply of labour and a redundancy of plant, would of itself have constituted a serious problem even had the post-war demand proved to be up to the peace-time normal. As events turned out demand fell below the pre-war level, and the existence of labour surplus in the industries concerned is one of the most serious of Britain's problems to-day.¹

This war-produced maladjustment in the relative growth of different industries tended, of course, to correct itself when the principal cause was removed, and the equilibrat-

¹ See below, pp. 338 et seq.

ing process began at a fairly early date. Figures published by the Ministry of Labour showing the numbers of insured persons in the separate industries are available from 1923 onwards and afford a means of measuring the reversal of the movement which had led to the overstocking of the heavy industries. The following table shows the reaction from the over-development of war-time industries which occurred in the six succeeding years after 1921:

Changes in the number of insured persons attached to various industries in Great Britain between July 1921 and July 1927¹

I. Declining Industries			II. Expanding Industries		
	<i>Absolute decrease</i>	<i>Decrease per cent.</i>		<i>Absolute increase</i>	<i>Increase per cent.</i>
Engineering	66,560	26.1	Distributive trades	327,090	10.0
Shipbuilding	53,940	20.5	Road Transport	49,840	3.6
Coal-mining	44,590	19.4	Motor Manufacture	41,030	7.8
Iron and Steel	16,440	21.4	Electrical Engineering	18,340	12.8
Marine Engineering	8,410	30.1	Artificial Silk	17,770	8.3
Chemicals	8,490	47.6			

The contraction of the first group of industries and expansion of the second is not to be explained entirely by a 'switch-over' of workers. Migration, of course, occurred, but failure to renew the wastage of labour in the first group and the tendency for the rising generation to gravitate to the second would account for a great deal. Here, it may be noted, Great Britain is at a disadvantage compared with Japan who, as has been pointed out, enjoys a much greater resiliency of labour so that readjustments of this sort can be effected more rapidly and with less strain. There was,

¹ The movement in more recent years will come to be considered in Section 3 dealing with unemployment, but it may be recorded here that since 1927 the 'declining' industries have declined still further and the 'expanding' industries have continued their expansion.

at the same time, in England a certain reduction of superfluous plant. But although some plant was dismantled, the elimination of machinery, like movements of labour, is a slow process in its initial stages, and it was not until the stress of depression became accentuated that there was any considerable reduction of surplus capacity either in labour or plant.

Financial difficulties also played their part in crippling British industries. Many found themselves seriously involved soon after the War. This was due partly to the short-lived boom, based almost entirely on inflated prices, whose rapid collapse served to accentuate, rather than to solve, the problems left by the War. A great deal of the equipment was installed during the War at very high costs, while the subsequent price-boom led to further expansion of plant installed at exaggerated values. With the collapse of the boom firms were faced with the necessity of capital reorganization if they were to have any hope of earning profits in the future. In the cotton industry the boom had been especially sudden and vigorous and had resulted in a great deal of speculative re-financing which afterwards could not be disposed of by the comparatively easy method of writing down balance-sheet values.

Professor Daniels and Mr. Jewkes¹ calculate that by July 31st, 1920, a proportion of the cotton industry representing 46 per cent. of the spindles and 14 per cent. of the looms had been financially reconstituted. The peak was reached in March 1920, when the average price per spindle had risen to about £4, as against £1.4 in 1919 and £2.25 in the middle of 1920. The new financing took the form, for a great part, of bank loans and thus saddled the businesses with heavy charges in the form of fixed interest and later on, when the boom ceased, with a serious burden of 'frozen' bank credits.

This damaging financial position continued till about 1928, since when, however, it has been very considerably alleviated by the writing down of capital and by the liquida-

¹ 'The Post-War Depression in the Lancashire Cotton Industry' (in the *Journal of the Royal Statistical Society*, vol. 91, 1928, pp. 153 et seq.).

tion of heavily-burdened companies, so that over-capitalization has lately become a somewhat less vital factor in the depression of the Lancashire cotton industry.

The year 1925 saw the beginning of a fresh set of difficulties for the British export industries arising out of Great Britain's restoration of the gold standard. The return to gold naturally involved deflation, which carried with it a falling price level. In order to continue to produce at a profit the manufacturer had to reduce costs. Such a reduction can, however, only be brought about slowly in a country like Great Britain, where wages and interest payments are more than usually rigid. The result was bad for the British exporter who, if he sold his goods at the usual price in a foreign currency, found himself in receipt of a reduced sterling sum, which he was unable to counter-balance by a simultaneous reduction of costs.

The British exporting manufacturer was thus already handicapped when, in common with the rest of the world, he was faced with the universal fall in prices which preceded the world crisis. His difficulty in reducing costs to correspond with prices was mainly due to the inflexibility of wages. Since the decline in prices money wage-rates in Great Britain have fallen comparatively little¹ while 'real' wages have risen. British Trade Union policy has usually favoured the maintenance of wage-rates even at the expense of some unemployment.

It is not only in connexion with wages that Trade Union policy—however justifiable it may be on sociological grounds—has had the effect of hindering the adjustment of the economic machine to current conditions. 'Demarcation', that is the limiting of certain classes of labour to certain processes, provides an example of this. In shipbuilding contracts have allegedly been lost not only because of these rules of 'demarcation' which made it difficult to cut down costs to a minimum, but also because of the inability of yards, owing to Union restrictions, to build a vessel within a specified time-limit. The Trade

¹ In the cotton industry, as mentioned later, they are estimated to have dropped about 15 per cent.

Unions' case, one should add, has been that wage-rates need not be reduced, or unemployment result, if only the industries themselves were sufficiently well organized. The position on both sides is fairly put by a writer previously quoted: 'The lack of mobility and adaptability is not a characteristic of wages and labour alone. The height of wages is not absolute but relative to the productivity of labour, and the productivity of labour depends not on labour only, but on the whole organization of production.'¹

The last two years of trade depression have, in point of fact, witnessed some changes. The cotton workers have shown signs of becoming more reconciled to the principle of decreasing the proportion of operatives per loom and the system has been fairly widely introduced with satisfactory results in increased efficiency.

The discussion has now brought us to the much debated problem of business 'rationalization'. It is a problem which is being forced upon British manufacturers by the industrial re-equipment and reorganization which has taken place among their foreign competitors during the last decade, Japan and Germany being notable instances. The Balfour Committee thought it 'abundantly clear that the first step towards putting British industries in a position to compete successfully in overseas markets is to subject their organization and equipment to a thorough process of reconditioning'.²

The term 'rationalization' embraces not only productive processes in an individual unit, but also the relations between firms, in order that the industry, as well as the individual firm, may have the maximum degree of efficiency. Thus it usually implies the need of some form of amalgamation or co-operation under a degree of central control.

Without accepting rationalization as a universal panacea of simple application, expert critics of the British industrial system have recognized that the recovery of British industry in world markets demands, as the Coal Reorganization Commission says, 'planned co-ordination in all its phases—development, production, marketing, and research—and

¹ Loveday, *op. cit.*, p. 177.

² *Final Report*, p. 297.

this can only be achieved by "amalgamation" in some form'.¹ The same authority, referring to the excessive individualism prevailing in the mining industry, remarked 'it is inconceivable that no room would be found for lowering the costs of production by getting rid of the waste due to duplication and misplaced effort that are the inevitable consequences of the outlook of each being bounded by the horizon of his own concern'.² Similarly in the case of the textile industry existing defects of organization and lines of improvement have been more recently propounded by the Chairman of the Calico Printers' Association.³ Having discussed the extreme individualism displayed by the various parts of the industry—where 'separate sections remain as sharply defined as ever, each putting its own interests first', manufacturing and trading being carried on in watertight compartments and the organization limited to 'horizontal' lines—the speaker urges the necessity of 'combinations on vertical lines of a series of units including spinning, weaving, finishing, and distribution directed to the reorganization of the industry' so as to make possible 'the elimination of surplus productive plant, reduction of manufacturing costs to the lowest possible point, and the securing of a closer and more intimate touch with our markets'. This, supplemented by an increased productive capacity of the workers (rather than by reduced wages), by better training and organization, by superior machinery, mass-production methods, and co-ordinated research, represented in the speaker's opinion the essentials of rationalization in the British textile industry.

When we look to see what has been actually accomplished we find that the adoption of planned co-ordination, requiring close united action within the framework of the industry, has been of a very limited nature. Progress has been mainly confined to the rather negative objects of

¹ *Report of the Coal Mines Reorganization Commission*, Dec. 1933, Cmd. 4468, p. 10.

² *Ibid.*, p. 11.

³ See Chairman's speech at the Ordinary General Meeting of the Calico Printers' Association, Sept. 1934, as reported in the press.

eliminating surplus capacity,¹ establishing price control, and stabilizing prices by a system of organized 'short time' (though this last experiment has met with little success). There is recent evidence, however, of a widespread desire to introduce more extensive rationalization and serious plans to this end have been formulated by sectional organizations within the industry itself. The lack of co-operation is visible not only between sections of the industry, but also between the firms composing the various sections. The number of these is undoubtedly excessive, since efficient production requires concentration of production in the most efficient plants, so as to secure the economies of increased specialization. At present there are about 700 spinning and 1,100 weaving concerns, as well as about 200 which combine spinning and weaving, all competing for a declining demand. In times of depression not only does every concern compete more severely in the markets for its own products, but it also attempts to gain a foothold in the more prosperous lines, which thus tend to follow one another into the pit of depression.

In contrast to the state of free competition within other sections of the industry, the 'finishing' trade has in the past offered an example of co-operation by amalgamations and price-fixing arrangements between the constituent firms, but the stress of competition during the slump has severely tried these attempts at 'team-work' and has proved that often the small independent firm can show greater efficiency of organization than the larger amalgamations which require men in control with unusual gifts for large-scale management. Marketing again is divorced from production; this not only involves a burden in the form of costs, but also difficulties in the way of producing the types of goods which are wanted in the various markets. This partly explains the statement that 'Lancashire has

¹ During the year prior to February 1st, 1934, the number of spinning spindles in Great Britain decreased by nearly $4\frac{1}{2}$ millions (to 43,756,000). This reduction was unparalleled in any other country, Japan having increased her spindles by nearly 1 million (to 9,530,000). (Manchester correspondent of *The Times*, March 12th, 1935.)

lost touch with the consumer'. In short, 'within each section of the industry—spinning, weaving, and merchanting—there exists a multiplicity of units, intensely individualistic in outlook, and unable to co-operate for long in any policy likely to improve the economic position of the industry as a whole'.¹

It should not be too readily assumed that the 'vertical' amalgamation² within the industry advocated by some of the experts would be the best means of solving its problems. There may be serious disadvantages in a too closely integrated organization, and it is possible that the essential advantages might be attained by a more efficient system of marketing and by increased co-operation between marketing and the various stages of production. What is incontrovertible is that the position of the Lancashire industry calls for a considerable measure of re-organization in many different departments.

Having now examined the difficulties and problems common, in greater or lesser degree, to all the exporting industries and comprising surplus labour and plant, over-capitalization, rigidity of wages, and problems of rationalization, we will now examine the effects produced upon the textile industry, which, besides being the premier export industry of Great Britain, has proved particularly vulnerable to the effects of eastern competition.

✓ While the world consumption of raw cotton in 1934 was 9 per cent. higher than in 1913, British mill consumption fell by 42 per cent.³ The reduced profits of the mills is another indication of the present position of the British cotton industry.

¹ *Report on the British Cotton Industry*, issued by Political and Economic Planning, p. 28.

² i.e. combination between concerns carrying on different processes of production.

³ It should be noted that raw cotton consumption is an imperfect index of activity, as the relation between weight and square yardage varies greatly according to the grade and nature of the finished goods. The figures given, therefore, serve merely as an indication that the British industry lost ground as compared with the world production of cotton goods.

Average Dividends on Paid-Up Capital

<i>Year</i>	<i>Number of Companies taken into account</i>	<i>Average Dividend</i>
1920	250	19.7 per cent.
1921	293	4.3 "
1924	315	1.7 "
1932	207	0.34 "
1933	194	0.7 "

For an industry dependent on export trade for the sale of 60 per cent. of its output, the state of its foreign markets is of course of primary importance. The extent of displacement of British cotton goods in world markets has already been dealt with in Chapter I and referred to in subsequent chapters. In reverting to the subject we shall here be mainly concerned to show the relative position in different parts of the world and the causes which operate in each, observing, in passing, that the sufferers in all cases have been principally those manufacturing groups which produce the coarser qualities of piece-goods—in other words the 'American' section of the trade as contrasted with the 'Egyptian'.

The following table shows, in more comprehensive detail than has been given already, the decline in piece-goods exports to a number of different markets:

Exports of cotton piece-goods from the United Kingdom

1913-1933

(In millions of linear yards)

	1913	1927	1928	1929	1930	1931	1932	1933
Total	7075.3	4189.1	3968.2	3764.8	2490.5	1791.2	2302.7	2116.7
British India	3057.3	1550.7	1452.6	1268.3	728.4	355.6	555.4	440.4
China and Hong Kong	716.5	116.9	205.1	209.9	69.9	95.4	143.5	60.9
Java	253.3	130.6	133.9	106.9	68.0	37.6	39.9	16.0
British Malaya	131.3	80.1	64.3	87.5	29.4	19.7	38.4	25.2
Egypt	266.6	178.9	143.1	169.6	130.4	78.2	90.2	70.0
Union of South Africa	72.0	70.2	66.6	70.4	54.8	54.5	50.8	129.7

GREAT BRITAIN

(Index, 1913 = 100)

	1913	1927	1928	1929	1930	1931	1932	1933
Total	59.0	56.1	53.1	35.2	25.3	32.5	29.9
British India	50.6	47.3	41.5	23.8	11.6	18.1	14.4
China and Hong Kong	16.3	28.6	29.2	9.7	13.3	20.0	8.5
Java	51.8	53.0	42.3	26.9	14.9	15.8	6.3
British Malaya	61.2	49.1	67.0	22.4	15.0	29.3	19.5
Egypt	67.0	53.5	63.5	48.6	29.3	33.7	26.2
Union of South Africa	97.5	92.3	98.2	76.2	75.7	70.6	181.0

For the year 1934 the total figures alone are available; they are, millions of linear yards, 2067.5; index figure, 29.2.

Another table may be given to show changes in the percentage distribution of British exports of piece-goods among the different markets:

	1924	1930	1933
Europe	16.2	15.7	18.2
Near East	8.8	9.4	6.8
India and Ceylon	37.8	34.2	24.6
Far East	12.0	7.8	5.7
North America	5.8	3.4	4.5
Central and South America	9.1	11.6	15.4
Africa	5.9	11.6	15.3
Australasia	4.4	6.3	9.5
	100.0	100.0	100.0

It should be noted incidentally that as the total exports in 1933 were less than one-half of the figures for 1924, every region which did not at least double its percentage between 1924 and 1933 represents a declining market.

Different factors are at work to account for the loss in the various markets. In some, such as the Argentine and Europe, the British loss is part of a declining consumption of cotton goods generally. There are other regions which have increased their consumption of British cotton goods, e.g. Australasia and Africa, but these do not nearly compensate for Great Britain's loss elsewhere, especially in the East. The decline in exports to India alone accounted for more than half the total decline over the period between 1913 and 1932. In India, as in China, the loss was due both to the development of home production and to in-

creased Japanese competition, as the relevant chapters of the present book have shown, though in India's case tariff restrictions on Japanese imports changed the situation in Great Britain's favour during the last year.

Japanese competition has been a dominant factor in Africa also, where home production is nil. In some other markets, e.g. South Africa and Egypt, the consumption of British goods has also declined; in other cases there has been an increase, but small in proportion to the increase gained by Japan. Even in an Empire market such as British East Africa Japan's contribution, which was 24 per cent. of the total imports in 1925, had risen in 1933 to 75 per cent., a striking example of Great Britain's inability, before the recent introduction of special protective legislature, to hold her own in regard to the cotton trade in regions where she possesses the many indirect advantages of political affiliation.

Lastly, speaking in terms of continents, we find the decline in British cotton exports mainly concentrated in Asia, whose imports from Great Britain, calculated as a proportion of the total yardage of imports, has declined from 58 to 37 per cent. over the nine-year period.

Coming to the domestic causes which may have contributed to this decline in the cotton trade, as regards finance and labour there is little to add to the general statements dealing with industries as a whole which were included in the earlier part of this chapter. The companies' uncalled reserves of capital have become for the most part exhausted, and in the case of many firms a serious handicap to efforts at reorganization lies in the fact that they find themselves tied financially to banks which, in the interests of their own shareholders, are indisposed to cut losses by wiping off commitments and at the same time hesitate to lend fresh money to an industry faced with so many uncertainties. The cases in which reorganization has been assisted by banks should not, however, be overlooked, the help afforded by the Bank of England to the Lancashire Cotton Corporation being a striking example.

In regard to labour, disputes between workmen and

employers in the cotton industry became a specially important feature after 1929. The 'more looms' dispute is an outstanding example. A slowing down of looms, with an increase in the number of looms worked by each operative, would reduce costs and has been urged as an essential policy, but it would also involve displacement of labour to the estimated extent of about 30 per cent. and for this reason has been vigorously opposed by the Trade Unions. Some measure of agreement has in recent months been reached, partly as a result of individual concerns cutting adrift from collective pacts, but a comprehensive settlement of the question has not yet been achieved. Meanwhile, in spite of a general fall of money wages since 1924, amounting to about 15 per cent., the rigidity of labour conditions in general still acts as a hindrance to the changes which appear to be essential for the recovery of Lancashire's prosperity.

It was mentioned on an earlier page that the reduction of surplus plant has been one of the fields in which most has been done in the way of reorganization in the Cotton Industry. In spite of this the redundancy problem remains serious, leading to price-cutting between firms. Present production in the 'American' section of the industry would provide full-time work for about 23 million spindles. The estimated number of spindles in existence is 32 million. After allowing for a reserve of spindles, at least 7 million can be classed as redundant. The surplus weaving capacity has been estimated at some 150,000 looms. The magnitude of these figures has led to various attempts to deal with the problem. The Lancashire Cotton Corporation has done most in this direction. Formed on the lines of a cartel, it originally controlled 9.3 million spindles, now reduced to 6.25 million, of which about 4 million are actually running.

The Corporation, together with such other smaller amalgamations as exist, controls in all less than one-third of the total spindles and a still smaller proportion of the looms. This is in striking contrast to what we have seen of conditions in Lancashire's principal competitor Japan, where so many of the processes of manufacture are almost entirely controlled by integrated concerns. To this absence of

co-ordination in the British system has to be attributed difficulties not only in lowering prices to a competitive level but also in meeting the specific requirements of the individual markets, where it has frequently been found that the type of cloth does not suit the local taste, that goods of superior quality only are available in markets where cheapness is the first consideration, and that the whole method of marketing compares unfavourably with that of Japan.

The advantages which the British industry still retains are generally accepted as lying chiefly in the production of the finer grades of material, where the unique industrial skill and technical knowledge possessed by the British industrialists count in the highest degree, though it is a significant fact that between 1930 and 1933 there was an average movement from higher to lower counts. To make full use of these assets requires again a ready adaptation of the structure of the industry to the conditions of the moment. By doing this the producers of finer grades should be able to meet competition by 'keeping the novelty and quality above that of the Japanese'—to quote again from the report of *Political and Economic Planning*—'while at the same time reducing the cost so that the consumer is encouraged to pay a little more instead of being forced to pay a lot more if he wants Lancashire goods'. Apart, however, from the probability that the industry in the East will eventually enter those fields which are still regarded as Britain's special preserve, it is important to remember that Lancashire must depend on the bulk production of cheaper goods in order to be able to develop the finer grades, and that, as things are at present, the section of the industry engaged in the production of coarser cottons which enter into competition with foreign goods comprises some two-thirds of the whole industry.

The problem before Lancashire remains serious and complex and no solution which is simple can be adequate. At all points various alternatives have to be explored involving changes, some of which are already in process, while some belong to the future. It is only possible to say

that there is a growing tendency towards unity of policy and action in all sections, which has found a definite focus in schemes to eliminate surplus capacity. It is in the strengthening of this tendency in fields of positive action that hope lies for the future.

Space will not allow of more than a very cursory examination of the position of other British staple industries affected by Eastern competition. The coal industry owes little, if any, of its present misfortunes to this cause, but it is in many respects typical of the depressed export industries and indicates the possible paths of escape from the depths of depression which other industries may follow. The Royal Commission on the coal-mining industry of 1925, finding conditions chaotic, recommended reorganization on the basis of the amalgamation of mines. The Coal Mines Act of 1930 not only created a cartel system for the purpose of overcoming temporary difficulties by means of control over prices and output, but also set up a Reorganization Commission with powers to enforce amalgamation. The Commission is understood to be contemplating the use of these statutory powers in certain districts where voluntary effort has not been forthcoming, the object being, in the words of its report, that 'operating units brought, where necessary, to an optimum size by means of financial mergers, should be associated over wider areas for purposes such as control over development, co-ordinated selling policy, and concentration of production'.¹

✓ The iron and steel industry which, though less dependent on foreign markets and enjoying protection in its own, is faced with growing competition from the East in the form of Indian products,² has similarly embarked on comprehensive schemes of rationalization. The National Committee of the Iron and Steel Industry, established in 1932, has prepared a scheme of reorganization, based on a number of approved associations each dealing with its own group of products and responsible for securing efficiency within its own section.

¹ See *Report of the Coal Mines Reorganization Commission*, Cmd. 4468, pp. 11-12.

² See Chapter IV, pp. 280 et seq.

This industry offers a striking example of a difficulty common to many British industries, namely competition from foreign countries which have entered late into the ranks of modern industry and can more easily adopt new methods. Although the industry is now much more efficient as regards plant than it was ten years ago, it is doubtful whether it has progressed as rapidly as some of its competitors. As the Balfour Committee pointed out, the problem of keeping up to date is 'more difficult in a country where the iron and steel industry had grown to full stature in an earlier generation than in countries which were establishing the industry for the first time on a large scale, since the latter had not to contemplate the demolition of existing plant and naturally built their new plant to the most modern designs'.¹

Shipbuilding, finally, represents a major British industry suffering the severest depression and gravely affected by foreign competition, including that of the shipyards which since the beginning of the Great War have sprung up in Japan.

In the war years 1914-18 the annual capacity of British yards increased by about half a million tons, while Japan increased her capacity by about the same amount. After 1922, when the war wastage had been made good, the excess capacity of the British yards made itself felt and since the end of that year never more than 55 per cent. of the available building berths have been occupied.

An attempt to meet the situation has been the formation of the National Shipbuilders Security Limited, a company owned by the shipbuilders, which aims at buying up and dismantling redundant yards and sterilizing the site for shipbuilding for a period of forty years. Some progress has been made on the Clyde, for example, and on the north-east coast, where by the end of 1930 a reduction had been effected of about 13 per cent. of the 1921 capacity. The policy described above offers, of course, only a partial solution, as it hardly affects the question of costs,

¹ The Committee on Industry and Trade ('Balfour Committee'): *Final Report*, Cmd. 3283, 1929, p. 185.

its purpose being to relieve the industry of the stress of severe competition.

British yards are still probably among the most efficient yards in the world. Maximum efficiency of the industry is, however, hindered by individualism, though some of the largest concerns are undoubtedly progressive. A rudimentary system of specialization which showed signs of developing has collapsed with the growth of depression, compelling firms to tender for orders of any sort.

The difficulty from which British shipbuilders suffer is not strictly one of competition. Apart from a declining demand for new vessels from British shipowners, orders have fallen off from abroad and this mainly because of the policy of foreign nations in constructing their own vessels almost regardless of cost. In spite of a slowness to adopt new developments, such as the construction of motor vessels, Great Britain still has advantages which, in normal competitive conditions, would probably preserve her lead. As it is she now builds but a comparatively small proportion of the world total. Japan has been growing in importance as a builder of ships, but this has been almost entirely for her own use and largely as the result of a comprehensive policy of subsidy and protection; the same is true of other countries, notably Italy.

The position of the shipping business is similar to that of the shipbuilding trade in that Britain has suffered greatly from subsidized foreign competition. Ocean freight rates have during the last few years fallen to an even greater extent than wholesale price levels. This can be partly attributed to the excessive growth of tonnage. Since 1929 the decline in world trade has been the principal cause of depression, a depression which for British shipping has been deepened by the growth of competition. Before the War British owners possessed about 40 per cent. of the total world tonnage of merchant vessels; to-day they own less than 30 per cent. The total meanwhile has increased by over 20 per cent. since 1920. Japan, the United States, France, Greece, Holland, Italy, and Norway have all considerably increased their fleets, whose employment they

encourage by varying degrees of subsidy. Britain has recently adopted a tentative subsidy for the tramp section, which has felt the depression most.¹ The effects of this experiment remain to be seen, but it appears rather unlikely, in view of present circumstances and trends, that it will materially affect the situation. The large proportion of world tonnage which has been laid up since 1929 involves serious difficulties analogous to those of redundant plant in manufacturing industries, while an important feature of British shipping is that it is dependent not only on general world trade activity but also on the position in the British export industries. It is possible, for instance, that the reduced export of coal has, because of the unprofitability of one-way cargoes, had a more than proportionate adverse effect on shipping.

Other exporting industries must be dealt with summarily. The woollen industry is one which has been severely depressed of recent years. Taking a quarterly average of declared values of exports, there has been a decline from 56 million square yards in 1924 to 32 million in 1934, which, low as it is, represents a recovery from a still lower level in the period 1931-3. The decline in values has been even more marked. In the Far East Japan has proved a very successful competitor and has largely displaced the British trade to that part of the world, which fell by $2\frac{1}{2}$ million square yards between 1933 and 1934. Recent Japanese competition is strikingly revealed in the figures for India:

Indian Imports

(In thousands of linear yards)²

	<i>12 months to March 1934</i>	<i>9 months to December 1934</i>
From the U.K. . . .	3,181	1,786
From Japan	2,090	6,332

¹ No subsidy is payable when the index of freights is 100 (1929 = 100). A subsidy of £250,000 is paid with a freight level of 99, rising to a maximum of £2 million at a freight level of 92 or under.

² Figures given in Chairman's speech at 1935 Annual Meeting of the Bradford Dyers' Association (see *The Times* of March 1st, 1935).

This competition appears very likely to become more severe in the future.

Increased competition is to be expected in other industries such as the lighter metal and electrical manufactures, which are already suffering from loss of markets. There are industries which, though at present comparatively prosperous, must be prepared to face growing foreign competition, of which artificial silk¹ and rubber are examples. These newer industries are indeed better organized to meet the challenge than the other staple industries, but their position cannot be viewed with equanimity.

§ 3. REACTIONS ON THE SOCIAL STRUCTURE: UNEMPLOYMENT AND THE 'DISTRESSED AREAS'

We have in the foregoing section reviewed the effects on British exporting industries of economic-geographical changes, of a universal decline in the demand for leading British exports, and of the rapidly growing competition from newly industrialized countries, particularly Japan. We have traced the results in the shape of industrial depression. We must now widen our outlook and see how this depression in the manufacturing areas most affected by foreign competition reacts on the social structure of the country.

This inquiry, which brings us to the crucial point of our study involving the question of the maintenance of established standards of life, involves an examination of the unemployment problem and the case of the 'distressed areas' with special reference to the cotton-manufacturing districts. As already said, the figure of one million is the approximate 'norm' for unemployment in Britain since the Great War.² A great part of this unemployment has been in the older industries; the newer industries, although

¹ Between 1931 and 1934 British rayon exports increased by 52 per cent., Japanese by 148 per cent. About one-half of the Japanese rayon exports go to British Empire markets where, as in the Netherlands Indies, they tend to replace cotton goods of the better class.

² This does not mean one million of *permanently* unemployed men, but represents the number out of work at any given moment.

contributing their quota in times of depression, have not the same record of persistent unemployment.

The following figures¹ provide a general picture of British unemployment and of its distribution among the separate industries divided for this purpose—as in an earlier part of this chapter—into the groups of ‘declining’ and ‘expanding’:

Unemployed (Insured) Workers

(Percentage unemployed middle of July each year.)

	1925	1927	1928	1929	1930	1931	1932	1933	1934
Great Britain . . .	10.8	9.1	11.3	9.6	16.5	21.8	22.6	19.3	16.6
<i>Declining Industries:</i>									
Coal-mining . . .	14.9	21.5	29.1	18.9	28.3	37.2	41.3	38.7	33.8
Iron and steel . . .	25.9	18.2	24.4	19.9	32.6	45.7	48.9	38.1	24.9
Cotton . . .	11.3	9.4	15.2	14.4	44.7	42.5	33.0	27.0	25.6
Shipbuilding . . .	34.9	22.1	27.7	22.7	32.1	57.2	63.1	58.8	47.7
<i>Expanding Industries:</i>									
Electrical Engineering . . .	5.6	4.7	5.0	3.9	7.9	14.2	16.1	14.2	7.3
Artificial silk . . .	6.2	6.6	5.6	7.5	23.6	31.2	20.5	15.6	13.4
Motors and vehicles . . .	6.5	7.9	9.4	7.2	13.1	23.0	22.2	16.9	10.6
Distributive trades . . .	5.6	4.3	5.0	5.3	8.1	10.8	11.5	11.1	10.0
Building . . .	7.6	6.8	10.2	8.5	13.7	18.0	27.3	19.8	16.1

1926 is omitted because of the General Strike.

The figures show how greatly unemployment has been concentrated in the older and essentially exporting industries. In 1929 the average unemployment percentage of the four ‘declining’ industries was 19.0 per cent. while for the five ‘expanding’ industries it was 6.5 per cent. In 1933 these averages had become 40.7 per cent. and 15.5 per cent. respectively. In brief, it may be said that ‘the

¹ These figures must be read with certain precautions. They are based on the *insured* population as recorded by the Ministry of Labour, and this is not the same as the *employed* population. All workers above a certain salary limit, workers not within the age limit of 16 to 64 years, and workers in occupations which are not insured (e.g. agriculture, seasonal trades) are excluded; altogether these latter comprise about 30 per cent. of the working population, so that the figures in the table refer to only about 70 per cent. Further, they are, of course, only workers ‘wholly unemployed’ and ‘temporarily stopped’, so that under-employment is not indicated.

Employed (insured) workers aged 16-64 at July each year
(In thousands)

	1927	1928	1929	1930	1931	1932	1933	1934	1934 (figures as percentage of 1923)
<i>Declining Industries:</i>									
Coal-mining	1,164.4	1,115.9	1,074.7	1,069.6	1,046.9	1,044.9	1,023.9	981.5	81.3
Iron and Steel	188.0	178.5	178.7	180.8	169.4	167.8	164.7	168.0	82.4
Cotton	562.1	554.0	554.8	564.1	550.1	518.0	499.9	467.4	83.5
Shipbuilding	208.5	202.4	204.5	204.7	195.4	181.9	169.3	158.8	60.9
<i>Expanding Industries:</i>									
Electrical Engineering	77.8	79.8	84.4	89.5	92.5	94.1	90.6	91.2	152.5
Artificial silk	53.6	70.3	73.9	78.1	72.5	70.3	70.0	73.3	202.2
Motors and vehicles	230.1	234.8	245.4	247.4	251.5	252.1	261.7	271.5	143.2
Distributive trades	1,552.7	1,613.8	1,679.1	1,764.4	1,874.8	1,950.2	1,992.0	2,005.3	162.9
Building	807.1	816.6	825.9	832.3	858.2	856.9	883.8	928.3	136.2

post-war problem of unemployment is primarily a problem of the older industries'.¹

To help in balancing the picture, we may now look at employment in these same industries from the positive angle, that is according to the variations in the number of persons employed.

It will be seen that the increase in employment in the second group is greater than the decrease in the first, but from the social point of view the increase cancels the decrease only to the extent that individual workers have transferred from one to the other. As pointed out already, accessions to the labour force of the expanding industries come largely through the joining-up of new recruits as distinct from the absorption of 'transferees', and whatever migration of labour may have occurred from the one set of industries to the other² there remains a solid core of unemployment in the older industries consisting of workers who cannot easily be changed over. To indicate the degree of 'permanent' unemployment it may be mentioned that of the unemployed at the end of 1933 a million were reckoned to be men who had remained out of work for over nine months and of these nearly one half had been out of work for a year or longer.

A factor which enhances the gravity of the problem is that the declining industries are highly localized in a few areas of the country, namely the north-west³ and Lancashire⁴ districts of England, the north-east coast,⁵ South Wales,⁶ and the south-west of Scotland.⁷ Thus in June 1929, these five 'depressed' areas, while containing 31.3 per cent. of the insured population of Britain, contained 47.1 per cent. of the unemployed. In June 1931 the percentages were 30.6 and 45.6 respectively. The following figures show how exceptionally heavy the incidence of unemployment has been in the areas concerned:

¹ Clay, *The Post-War Unemployment Problem*, p. 12.

² Migration of labour in the distressed areas is dealt with below, p. 341.

³ Coal, iron and steel, shipbuilding.

⁴ Cotton.

⁵ Coal, iron and steel, shipbuilding, engineering.

⁶ Coal, iron and steel.

⁷ Coal, iron and steel, shipbuilding.

*Percentage of insured workers unemployed in June
each year*

	1924	1929	1931	1932	1933
Depressed Areas . . .	13.6	14.5	31.3	31.2	28.8
Other Areas . . .	7.1	7.3	16.5	18.1	15.2
Great Britain as a whole	9.2	9.6	21.0	22.1	19.3

We see that unemployment throughout the period has been about twice as heavy in the depressed areas as in other parts of the country.

Each of these areas has, of course, its special problems, but they all have the common one of possessing a 'surplus' of labour. The Industrial Transference Board, which was set up in 1928 to facilitate the movement of workers away from areas of depression, accepted the existence of this problem of surplus labour as one requiring to be dealt with by transfer. By surplus is meant, as defined in the Board's Report, 'the difference between the present insured personnel of the industry and the number of work-people who can count with reasonable certainty upon obtaining their livelihood from the industry'. The need of scaling down the size of certain industries to meet this state of affairs was recognized. In the coal industry the policy was adopted of limiting recruitment of labour so as to allow wastage to have full effect. The size of the surplus is such, however, that a very long period is required for spontaneous adjustment of this type to become an effective cure. As regards the size of the surplus, the Industrial Surveys of the depressed areas made in 1932 give the following estimates:¹

Number of surplus workers

Lancashire . . .	160,000
South-west Scotland . . .	100,000
North-east coast . . .	64,000
South Wales . . .	50,000
Merseyside . . .	26,000
Depressed areas . . .	400,000 = 16 per cent. of their insured workers.

¹ The method of estimating the surplus for the Lancashire Area was

The position is, in short, that with the continued depression in the staple industries, the depressed areas have already a working population materially greater than their labour requirements and at the same time offer a diminishing field of employment.

The situation is further aggravated by the displacement of labour by labour-saving machinery and methods. To show how extensive this process is, examples may be quoted from coal-mining and iron and steel producing areas on the north-east coast. In the former the ratio between worker and output was reduced by a potential 25 per cent. in the five years between 1924 and 1929; in the latter an increase of output of half a million tons was effected in 1929 with approximately the same number of workers as in 1924. In shipbuilding output per man has increased and there is a prospect of further increases due to new methods in the future. This last is true of the Lancashire cotton industry, where the adoption of technical changes has been comparatively slight during the last ten years, but considerable changes may be impending as the result of past experiment. High draft spinning, for instance, has been shown to be capable of reducing the labour element by as much as 20 per cent.;¹ in weaving the adoption of a system of eight looms per worker is reckoned to be capable of saving 30 per cent.² in labour for a given output, and the introduction—slow up to the present—of automatic looms would cause a substantial labour reduction. At the same time 'rationalization' of the industry in the form of the concentration of production in the most efficient units would eliminate the short time prevailing at present and so tend to swell the numbers of those suffering from total unemployment though without necessarily reducing to take the position in 1929 as being normal to post-war conditions, and to regard the amount of unemployment in that year as denoting surplus labour. The same method was largely used for the other areas, varying checks and qualifications being of course, used in each case.

¹ *Industrial Survey of Lancashire* (1932, H.M. Stationery Office), pp. 134 and 145.

² *Ibid.*, p. 146. One case quoted shows a reduction of 64 per cent. in labour requirements.

the aggregate of hours worked. It is clear, therefore, that the social problem of the distressed areas cannot find any immediate solution in an increase of output brought about by increased efficiency, although without this increase of efficiency, conditions are threatened with becoming even worse.

Since the 'switching' of labour from the depressed to other more flourishing industries is accepted as being essential for the relief of the distressed areas, it is worth while to examine how this is proceeding. The growth of new industries, a noticeable phenomenon throughout the country as a whole, has, generally speaking, been least pronounced in the distressed areas with their highly specialized industries and types of worker. Lancashire is an exception, owing mainly to the fact that it already possessed a greater diversity of manufactures before the crisis arose. Compared with the country as a whole Lancashire enjoys indeed a relatively favourable percentage increase of employment among 'expanding' industries, as the following table shows:

*Index of insured persons employed in a group of
42 'expanding' industries*

	1923	1929	1930	1931
Lancashire Survey Area .	100.0	128.7	125.7	127.4
Great Britain and Northern Ireland	100.0	128.0	128.2	129.9

Even in Lancashire, however, industrial expansion has not been sufficient to counteract contraction and there are districts dependent mainly on cotton which have become as 'derelict' as the pit villages of Durham and South Wales. The position has been summed up by Mr. E. D. McCallum as follows:¹

'Expansion has taken place even in the depressed areas in several of the industries which are growing throughout the country, but in none of the depressed areas has the growth of the expanding industries been sufficiently great to absorb both the number of

¹ 'The Problems of the Depressed Areas' (in the *International Labour Review*, vol. xxx, no. 2).

workpeople displaced from the basic industries and the number of new potential recruits to industry from an increase in the population of working ages.'

The depressed areas do not, in fact, offer sufficient local markets for the newer industries, while the general state of depression within the areas creates disadvantages from the point of view of business leaders looking for suitable areas for new development.

Meanwhile geographical migration, that is to say the drift of workers to other parts of Great Britain, in spite of its many difficulties, has been on a considerable scale. During the post-war period workers have been moving away from the depressed areas to the new industrial regions of the south and east. The following table¹ shows the extent of this movement over the intercensal period:

1921-1931

	<i>Gain (+) or loss (-) by migration (in thousands)</i>	<i>Migration as percentage of the 1921 population of the area concerned</i>
<i>Depressed areas:</i>		
Pembroke, Carmarthen, Glamorgan, and Monmouthshire . . .	-242	-12.3 per cent.
Durham and Northumberland . . .	-207	-9.3 "
Cheshire and Lancashire	-154	-2.6 "
<i>Expanding areas:</i>		
South-east of England .	+615	+5.0 "
Greater London alone*	+210	+2.8 "

* Included also in 'South-east of England'.

The above figures cover ten years, but the migration movement was mainly concentrated in the second half of the period, i.e. after 1926,² when the situation was becoming more clearly realized by the industrial workers of the north, and it was not till 1928 that organized migration

¹ From Census of 1931, *Preliminary Report*, p. xiii.

² In the first five years of the decade there was in Lancashire actually an inward balance of migration.

was taken in hand.¹ Nevertheless a study of conditions in Lancashire shows that it is no sudden development which will easily be reversed. Lancashire, as the figures show, has not experienced the same degree of migration as the other depressed areas. The large proportion of female labour in the cotton industry makes the family income, rather than the earnings of the head of the family, the important consideration from the workers' point of view, and this naturally discourages migration. Further, the prevalence of short time and of under-employment has tended to mask the true position in the labour market.² The general depression, by creating unemployment in all areas, has naturally made transference exceedingly difficult, and even created doubts as to the efficacy or wisdom of such a policy, and although the results of organized transfer have been on the whole encouraging, they can hardly be said to have affected the problem to any major extent. Most of the migration movement has been entirely spontaneous and it seems as if it had now reached its limit, at least for the present.

The large-scale transference of labour is beset with many difficulties and subject to many limitations. To illustrate this, it was found in the north-eastern division of the Ministry of Labour that in 1931 of nearly 12,000 cases of workers aged 18-45 years who had been unemployed for three months or longer, 55 per cent. were men unfit or unwilling to transfer, while those available and willing to transfer comprised only 12 per cent., the remaining 33 per cent. of the cases being workers willing to transfer but needing training or 'conditioning' before they could be regarded as suitable.

We must repeat that the main problem of the depressed areas is the existence of a surplus of older workers, many of whom have been unemployed for a long period. So far as evidence goes, migration has taken place largely among the younger men; new recruits to industry have been

¹ The Industrial Transference Scheme was applied to the coal industry in 1928 and extended to the cotton districts in June 1930.

² Cf. *Industrial Survey of Lancashire*, op. cit., pp. 127-8.

absorbed into newer trades and the surplus left consists of workers who have been unemployed for a long period and are too old either to migrate or to change readily into another trade. In Northumberland and Durham, for instance, over 30 per cent. of the unemployed men in June 1934 were over 35 years old. In this same area 38 per cent. of the unemployed had been without work for over two years. In South Wales, at the same date, 55 per cent of the unemployed males had not worked for over two years, while nearly 12 per cent. had been continuously unemployed for over five years.

Lancashire is relatively fortunate in having a smaller proportion of unemployed workers suffering from long periods of unemployment. This is because of the short-time system and also because the depression started there more recently; but to compensate for this, Lancashire has an additional problem in the 'banking up' of younger workers who either do not obtain, or are compelled to dissipate, the industrial skill normal to the cotton operative. The newer industries offer employment to unskilled rather than skilled labour and, so far as the evidence shows in organized transfer at least, migration has occurred among unskilled workers rather than among the skilled. The cotton operative is not only skilled, but skilled in a type of work which is peculiarly useless as a training for employment in any other major occupation.

Taking the position as a whole, all the adjustments which have up to the present occurred have been insufficient to balance the demand and supply of labour in the depressed areas, with the consequence that some 400,000 persons in these areas are without hope of permanent employment even in good years,¹ and their support falls on the rest of the community.

This brings us back once more to the decline of the export trade as an essential part of the British problem of the maintenance of standards of life. What is the prospect for the future? To a large extent the developments described in the foregoing pages may be inevitable. The

¹ See E. D. McCallum, *op. cit.*

progress of world economy on the lines of the increasing industrialization of countries which had formerly depended for their manufactured requirements upon a small group of highly industrialized countries, together with the opening up of new countries previously innocent of modern industrialism, was already implicit in the conditions of nineteenth-century development. The tendency 'is a natural and universal one, inseparable from healthy economic progress'.¹ It was, however, artificially hastened by the Great War, and has again been over-stimulated by the political doctrines of self-sufficiency which have pervaded so much of the world during the last decade. Great Britain, handicapped by an economic structure of an exceptionally rigid nature, has now to contend with the new and powerful competition of younger industrial centres developing especially in the East.

In so far as the loss of markets has been intensified by the recent growth of artificial restrictions on world trade, we are dealing with a phenomenon of an alterable nature. It has been shown, however, that the relaxation of trade restrictions could, at the best, be only a partial solution, and we have moreover to remember that, since these trade restrictions are themselves in part a result of the change in world economy—and furthermore designed to encourage the change—they share in its character of permanency and are so much the less likely to disappear from the scene.

To maintain that the British economy has entirely failed to respond to the stimulus of changed conditions is certainly unwarrantable. Simultaneously with the growth of unemployment in the older export industries, there has been an expansion of *aggregate* employment in the country. But this, as has been emphasized, is far from disposing of the social problems arising from 'block' unemployment. The existence of a deadweight of unemployed in the depressed areas is a vital problem in itself, and reveals the inadequacy of any readjustment of labour and capital which does not provide the means of increased exporting power, whether

¹ Committee on Industry and Trade ('Balfour Committee'), *Survey of Overseas Markets*, 1929, p. 9.

by means of reviving the old staple industries or by developing new industries manufacturing articles for export.

Before an appreciable revival of older industries can take place, it would seem that they need a large measure of reconditioning and reorganization, which in itself would add for the time being to the problem of surplus labour. Moreover, even when reorganized, they probably could not expect to recover the place in the country's economy which they occupied before foreign competition grew to its present intensity. The growth of new categories of industry supplying goods to meet the changing world demand appears, therefore, to be an essential part of any effective solution.

CHAPTER VI

EFFECTS OF EASTERN INDUSTRIALIZATION UPON TRADE RELATIONSHIPS IN THE BRITISH COMMONWEALTH

IN the first chapter of this book we examined Japan's expansion into world markets and the degree of consequent displacement of exports from Great Britain and other Western manufacturing centres. In the succeeding chapters, dealing with industrial development in individual Eastern countries, we observed in passing some of its effects upon international trade relations. In the present chapter we shall concentrate on a special aspect, namely the extent to which Japan's industrialization (and to a minor extent China's) results in the creation of a new nucleus of trade in the Pacific, thereby affecting old-established trade relationships between third parties.

To examine the process fully would imply a survey of the trade of the whole world. We shall have to confine our attention to the trade relations of Great Britain and the British Dominions, especially those bordering on the Pacific. The special interest of British imperial trade seen from a British standpoint is sufficient ground for selecting this field, but it may also be added that the British Dominions bordering on the Pacific furnish a typical illustration of countries whose exports consist largely of the foodstuffs and raw materials needed by Japan in her process of industrialization and who are thus susceptible of being drawn into her trade orbit. Unfortunately space precludes the study of other cases such as the Netherlands East Indies, the Philippine and Hawaii Islands, or French Indo-China.

An extremely cursory review of the development of British imperial trade relations will be a useful prelude to the examination of the effects thereon of Japan's industrial expansion.

When in the first half of the nineteenth century Great Britain abandoned the 'old colonial policy' of exclusiveness

in trade, she was left still with a strong economic basis for the exchange of goods between herself as a manufacturing country and her colonies as producers of the raw materials which her industries needed. This system of the exchange of raw materials for manufactured goods has survived to the present time, and is a dominant factor in Great Britain's overseas trade. In the middle of last century 28 per cent. of British overseas trade was conducted within the Empire; in 1890 the percentage was 33; in 1923 it was 36, and in 1934 approximately 40.

A trade based on the exchange of raw materials for manufactures was bound, however, to change with the passage of time, and new tendencies destined to alter its nature were already asserting themselves before the end of last century. The opening up of young countries with the help of capital and capital goods largely supplied by Great Britain led to the establishment of industries in the new countries themselves for the supply of their local markets. In the British Dominions, as elsewhere, these rising industries were encouraged by measures of protection. The development of their tariff policies was at about the turn of the century modified, but not changed in principle, by preferential treatment granted to the United Kingdom and other parts of the Empire. A system of preferences became fairly general but left room for substantial protection for the Dominions' home industries. The Great War produced disturbances of trade and economic innovations which further modified trade relations between the Mother Country and the Dominions. During the War the forced cutting-off of imports from the United Kingdom gave a tremendous impetus to the growth of manufacturing industries in other parts of the Empire, particularly in Canada and Australia, and also enabled the U.S.A. to supply to a considerable extent the goods formerly imported into the Dominions from the United Kingdom. Fresh currents of trade were set up in all parts of the world, notably in the Pacific. To quote the League of Nations' *Memorandum on International Trade and Balances of Payments*:

✓ In comparing 1925 with 1913 figures, the United States and

India now buy less from Europe and more from Asia; China and Japan buy less from Europe and more from North America; Australia less from Europe and more from both North America and Japan. Reciprocally, India sends a greater proportion of her goods to North America and Asia, China to North America; Japanese exports to Europe have dropped from 23 per cent. to only 7 per cent. of her total exports, while those destined for North America have risen from 30 to 45 per cent. Australian imports from Europe have dropped from 71 to 54 per cent. of her total imports. . . . Trade is passing from the Atlantic to the Pacific.

The effect of these trade changes visibly lessened the dependence of the Dominions upon the United Kingdom.

The following figures illustrate the change which took place in the cases of Canada and Australia:

	<i>Average</i> 1909-13	<i>Average</i> 1924-30
CANADA		
Percentage of <i>Imports</i> supplied by the U.K.	23	16
Percentage of <i>Exports</i> sent to the U.K.	50	33
AUSTRALIA		
Percentage of <i>Imports</i> supplied by the U.K.	60	42
Percentage of <i>Exports</i> sent to the U.K.	45	40

A similar trend became noticeable in the case of New Zealand and also of South Africa. Corresponding to this decline in Great Britain's share of the Dominions' import trade prior to the world depression, there was a growth in the relative importance of their imports from the U.S.A., and also of inter-Dominion trade; to a minor extent there was a diversion of trade to Japan. In Dominion exports the U.S.A. played a smaller part in displacing the United Kingdom and, except in Australia's case, the change in proportions was chiefly in favour of Europe. Until the depression Japan had not become of very much greater consequence than before the War as a market for the Dominions, excepting again Australia in whose export trade Japan began to figure increasingly immediately after the War.

During the depression a fresh change has occurred. There has been a recovery in the relative position of the

United Kingdom both as a market for Dominion exports and as a supplier of their imports, a recovery effected chiefly at the expense of the U.S.A. and of Europe. Japan's share of the trade of the British Dominions as a whole simultaneously increased, though in no case, except Australia's, did it amount to more than one-twentieth of the total external trade of any Dominion. Four-fifths of the total trade of the self-governing Dominions is at the present time divided between British countries, Europe, and the U.S.A., and in most cases less than one-tenth is conducted with foreign Far Eastern countries. Meanwhile on Great Britain's side the proportion of overseas trade conducted within the Empire has very materially increased and in 1934, when the Ottawa Agreements had had time to take effect, the proportion rose, as already stated, to 40 per cent. of the whole.

Thus it appears that, taking the Empire as a whole, the effects of Eastern industrial expansion have not vitally affected the current of imperial trade up to the present time, and if we had only to consider the immediate position, the examination to which we shall now proceed might well seem superfluous. Apart, however, from the fact that this generalization as to the effects upon trade relations is far less true of Australia—the most important of the Dominions from the point of view of Great Britain's trade, accounting for between 6 and 7 per cent. of her total trade—we are concerned in this chapter as much with the future as with existing conditions and have to consider whether latent trends are discernible which, though at present of minor effect, may develop to large proportions.

The fact that the population of the United Kingdom and most of western Europe has become stationary, or declining, whereas in the Far East, particularly in Japan, it is still increasing at a fairly high rate, is of fundamental importance to the food and raw material export trades of the Dominions and accounts in part at least for the growing importance of the Far East as a market for Dominion produce.

This, as intimated above, is particularly true for Aus-

tralia. Not only does Japan need Australian-produced foodstuffs—wheat and possibly (with changes in Japanese diet) meat—but her industries also are complementary to Australian raw materials. Meanwhile she exports to Australia classes of goods which for the most part Australia does not produce for herself and it has been stated that 'there is probably no country, certainly no Pacific country, with respect to which an exchange of products is more to the economic benefit of both than it is in the case of Australia and Japan'.¹ It has been calculated that 'of the total Japanese imports into Australia in 1932-3 nearly half the goods were not competitive with Australian manufactures, though two-thirds were, to some extent, competitive with British goods'.²

Taking first the two principal Australian commodities exported to Japan, wool and wheat, we find Japan taking an increasing proportion of Australia's total exports in recent years. The proportion of the Commonwealth's raw wool exports sent to Japan rose from 7 per cent. in 1921-2 to 24 per cent. in 1931-2 (against 29 per cent. taken by Great Britain). In regard to wheat, the proportion of the total exported to Japan and China was on the average 7.5 per cent. in the years 1926-7 to 1929-30 and actually rose to 40½ per cent. in 1931-2³ (approximately the same proportion as was taken by Great Britain). In 1933-4 Japan was the second most important market after the United Kingdom for both commodities, though account must be taken of the growing importance of butter exports from Australia (which in 1933-4 ranked higher in value than wheat) and of which over 90 per cent. is sent to the United Kingdom. Butter, however, is a product for which the demand might rapidly rise among a population turning from agriculture to industry and needing increasing supplies of food with a high protein content.

¹ Institute Pacific Relations Conference, 1933. *Trade and Tariffs of Certain Pacific Countries*, p. 41.

² Bank of New South Wales, Monthly Circular, March 1934.

³ This was, however, an exceptional year for China whose home supply of foodstuffs had been heavily reduced by floods.

Wool is the most important staple of Australian-Japanese trade and likely to remain so. The following figures show the growth of this trade over a period of years:

Wool Exports from Australia to Japan¹

(In millions of lb.)

1925-6	1926-7	1927-8	1928-9	1929-30	1930-1
59	79	106	101	83	151
1931-2	1932-3	1933-4 (preliminary)			
186	197	170			

Japan's consumption of wool is steadily on the rise, being now roughly equal to two-fifths of the consumption of the United Kingdom. Reckoned *per capita* of population it has increased from 1 lb. in 1914 to $3\frac{3}{4}$ lb. at present. Her imports of wool increased fourfold in the ten years prior to 1932 when they reached the total of 206 million lb.

On the import side the drastic fall in Australian imports after 1929-30 affected Great Britain proportionately to a much greater extent than Japan, whose exports to Australia in the following two years decreased by less than one-half against a more than two-thirds reduction in those of the United Kingdom. This is especially significant in view of the fact that more than half of the imports from Japan consisted of silk, a commodity particularly susceptible to the effects of the general depression.²

The course of Australian trade with Japan as compared with that of her trade with Great Britain can be seen in the following tables:

Australian Imports

(Percentages of Total)

	1909-13 Average	1922	1925	1928	1929	1930	1931	1931-2	1932-3	1933-4 (9 months)
U.K.	59.7	51.4	43.9	42.6	39.7	41.9	39.4	40.0	40.6	42.4
Japan	1.2	3.5	2.6	2.9	3.3	3.2	4.0	5.5	6.1	6.4
U.S.A.	11.3	18.2	24.6	23.9	24.6	23.4	19.3	16.2	13.9	12.1

¹ The figures are for 'greasy' wool only and do not include scoured and washed wool and 'tops'.

² The composition of Japanese imports into Australia in 1931 was as follows: silk 53 per cent., animal substances $14\frac{1}{2}$ per cent., piece-goods 5 per cent., chinaware 3 per cent.

Australian Exports

U.K.	45.1	45.1	42.6	38.5	39.1	53.0	50.7	53.1	55.8	48.0
Japan	1.6	6.2	7.5	8.9	8.1	5.2	9.1	10.8	9.5	12.0

These tables show an almost unbroken rise in Japan's percentage share of imports into Australia from 1925 to the present time and a less steep, but fairly steady, rise in her share of Australian exports. Great Britain's proportion meanwhile has remained comparatively constant apart from the sudden upward jump in her percentage of Australia's exports which came with the world crisis.

With regard to Japan's increased proportion under 'imports', the corresponding loss seems to have fallen chiefly on the United States (whose figures are included for comparison) while the reduction in exports has fallen largely upon the British Colonies and the markets of the other Dominions.

The growing demand of Japan for raw products came at a time when it was of very material assistance in helping to combat the disastrous effects which Australia suffered, in common with other primary producing countries, at the onset of the depression. The question is whether it portends the building up of a new trade relationship of a permanent nature. With regard to this some Australian economists view the declining demand of the West for the products of the Pacific countries as no more than a temporary phenomenon and visualize a return to what they consider to be the 'normal' conditions of world trade which obtained before 1930. Much depends upon whether this expectation is correct.

From the view-point of Great Britain a disquieting factor in the developing situation is Japan's clearly expressed policy of importing as far as possible from countries which are willing to receive her exports. The balance of trade between Japan and Australia has for some considerable time been unfavourable to Japan, whose imports from Australia are in value about three and a half times her exports. This is regarded by Japan as unsatisfactory. Australia will be under pressure, in order to retain her

market, to correct the balance by increasing her purchases of Japanese goods. Such an increase would have to be sought chiefly at the expense of her trade with the United Kingdom, seeing how small a proportion she imports from elsewhere. Although there is in Australia a growing recognition of the advantage of a flourishing trade with Japan, it is fairly certain, in view of local sentiment, that Australia will only transfer her trade from the Empire to Eastern countries if she is compelled by pressure of economic circumstances to do so; but the future alone can decide how far a return to the conditions which prevailed before 1929 will be economically possible. One factor at least which has given a powerful stimulus to Australia's Far Eastern trade can be reckoned to be of a non-permanent nature in so far as it depends on currency and price factors which in the long run must come into self-adjustment. This is the fall of the exchange value of the Australian pound to a point of depreciation substantially lower than that of the rest of the British Empire with the exception of New Zealand. This extra depreciation naturally helped Australia in foreign trade competition and, in particular, gave her an advantage over Canada and the U.S.A. in selling wheat to China, who always tends to buy in the cheapest market. The effects of depreciation applied, it is true, equally to Australia's trade with other parts of the British Empire, but it helped materially to gain a footing for her trade in such a low-price market as China.

In May 1934 Mr. Latham, Australian Minister for External Affairs and Minister for Industries, visited Japan as leader of an Australian Mission sent to foster cordial relations in all matters between Australia and the countries of the Far East. In an address broadcast from Tokyo he summed up the position concerning Australian trade relationships thus:

'Australia is a Dominion of the British Empire; our loyalty and affection are given to the people of our own race and I am sure that the people of Japan, loyal as they are to their own country, will understand that Australia owes her first duty to her own people, and after that to the great British Empire of which she forms a part.'

He proceeded then to give the other side of the picture, saying:

'While, however, Australia is part of the British Empire, and proud to be a part of the British Empire, we realize that we are a nation in the Eastern Hemisphere. We already have intimate relations with the East, and we hope that these relations will in the future become still more real.'¹

The Japanese view, meanwhile, can be found expressed in the following passage of a bulletin issued by the Tokyo Association for Liberty of Trading:

'It is clear that Australia and New Zealand, although they are constituent parts of the British Empire, cannot be shut up in the latter's bloc system, and that they will find it necessary to develop much closer trade relations with some countries outside the Empire, and that can be done without any prejudice toward the mother-country'.²

Early in 1935 conversations were begun between representatives of the Commonwealth Government and an official Japanese Trade Delegation with a view to a trade agreement between the two countries on the basis of a continued free market in Japan for Australian wool and wheat and greater facilities for the import into Australia of many classes of Japanese manufactures. The occasion evoked a statement from the president of the Associated Australian Chambers of Commerce objecting to the principle of entering into a trade agreement aimed at balancing the trade, while other prominent speakers deprecated the idea of making concessions to Japan at Great Britain's expense.³ At the time of writing no result of the negotiations has been reported in the press.

China meanwhile has recently rivalled Japan as a market for Australian wheat and offers, as Mr. Latham's Mission reported, 'a substantial market in the essential foodstuffs which Australia produces'. Australian exports to China showed an annual average of about £800,000 between

¹ Australian Mission Report, p. 26.

² 'Japan's Trade with Australia and New Zealand', in *Bulletin No. 2*, pp. 13-14, of the Tokyo Association for Liberty of Trading.

³ See *The Times*, Feb. 1st, 1935.

1920 and 1930. In 1931 they reached the figure of £3,345,000. Australia was becoming the chief supplier of China's large, though fluctuating, wheat demands when in 1934 the American 'wheat loan' to China temporarily captured the market for the U.S.A. Expressed as percentages of total Australian exports, China took in 1932-3 about 25 per cent. of Australia's flour exports and nearly 30 per cent. of her exports of wheat. The position in this year was, as already mentioned, abnormal, owing to floods in China, but these figures show the potentialities of the Chinese market.

The prospect in regard to Australian trading with Japan and China has been summed up by the Bank of New South Wales in the following passage taken from the Bank's Circular for March 1934:

'In brief, the position is as follows. Australia needs markets for her primary products. The greatest potential markets for those products are the Far Eastern countries. Of these countries, China is at present the largest buyer of our wheat and Japan the largest buyer of our wool, but if Japanese living standards are allowed to improve, there is the possibility of selling more foodstuffs to Japan in the future. No country can reasonably expect the Japanese to continue the purchase of their goods, if at the same time Japanese goods are being excluded, and this is especially so when Japan has available other sources of supply. South Africa, South America, and Canada could easily supply Japan with goods of the same type as Australia is able to offer. If Japanese exports did not meet our requirements, the position would be different, but the improved quality of Japanese goods compares very favourably with the quality of similar exports from overseas.'

The Japanese market for New Zealand raw material exports has developed to a less extent and trade between the two countries is on a small scale, amounting to a total in 1934 of only £1½ million, representing under 3 per cent. of New Zealand trade as a whole. The direction of the trade is also the reverse of that in the case of Australia and Japan, the balance being still in 1934 slightly in favour of Japan. The proportion of New Zealand's imports from Japan has, however, been mounting slowly but regularly since 1929 and reached in 1934 £662,807. Her exports

to Japan which were insignificant in 1930 have during the last five years shown a steep rise:

New Zealand Exports to Japan

	1930	1931	1932	1933	1934
£ (New Zealand)	154,741	267,899	236,799	354,000	853,071
Percentage of total New Zealand ex- ports (excluding specie)	0.3	0.8	0.6	0.86	1.81

Although the abrupt rise in the absolute figure for 1934 may be partly accounted for by the enhanced value of wool in that year, there is evidence in these figures of Japan's expanding market for the raw material products of New Zealand as for those of her sister Dominion, and having regard to New Zealand's importance as a producer of wool (her third most valuable export) and the similarity in general of her economy to that of Australia, we may reasonably infer that the same forces which we have seen to be at work in Australia's case are tending to bring New Zealand closer into the orbit of Japanese trade. A limiting factor has been the lack of direct steamer services between the two countries, an all-important deficiency in dealing with meat or dairy products needing refrigeration. This, however, is a state of affairs which Japan is likely to remedy if her trade with New Zealand continues its present growth.

The wool trade which figures so prominently in Japanese-Australian trade relations enters also into those between Japan and South Africa. For reasons of national trade policy attempts are being made in Japan to increase purchases of South African wool so as to encourage South African purchases of Japanese manufactures. The latter are showing a steady rise, having increased from 88 million yen in 1932 to 137 million in 1933 and to over 90 million in the first half only of 1934, and the trade balance is very heavily in favour of Japan, whose sales to South Africa are as much as ten times as great in value as her purchases. The higher price of South African wool has necessitated special arrangements in Japan between the different branches of

the wool trade and the shipping interests for sharing the extra cost—an illustration of Japan's facility in co-ordinating business along national lines to which we referred in an earlier chapter.¹ Wool exports, it may be mentioned, have recently formed approximately one-tenth of the total exports from South Africa. The opinion has been expressed by the Bank of New South Wales:

'The large increase in the share of Japanese exports taken by South Africa is of some significance to Australia as it may tend to retard the sale of Australian wool in the Far Eastern markets. The natural policy of a nation like Japan, which is attempting to expand her export trade in the face of a suspicious world, is to buy her raw materials and foodstuffs from countries which are willing to buy her exports in return. The increasing share of Japan's exports taken by South Africa is tending to stimulate the purchase of wool by Japan from that country.'

In the case of Canada, although we find her overseas trade inclining since the War towards the Pacific and—in so far as her exports are concerned—towards non-British countries within that area,² the tendency to a development of trade with the Oriental countries is not pronounced. Statistics covering the last eight years show the following proportions:

Imports for Consumption
(Percentages of Totals)

	1926	1929	1931	1932	1933	1934	<i>Calendar Year 1934</i>
U.K.	17.6	15.3	16.5	18.4	21.3	24.2	22.1
British Empire	22.5	20.3	22.7	25.6	29.6	32.4	30.6
U.S.A.	65.7	68.6	64.5	60.8	57.2	54.9	57.2
China	0.3	0.2	0.5	0.6	0.4	0.5	0.5
Japan	1.0*	1.0	1.0	1.0	1.0	0.8	0.8

* Immediately after the War this figure was 0.2 per cent.

¹ See Chapter II, p. 85.

² Taking Canada's 'trans-Pacific' trade as a whole the percentages of Canadian exports to British Possessions in the area have been as follows: 1910—71 per cent.; 1913—78 per cent.; 1925—52 per cent.; 1929—43 per cent.; 1932—38 per cent. The corresponding percentages for imports into Canada have remained fairly constant at 50–60 per cent.

Exports (Canadian)

(Percentages of Totals)

	1926	1929	1931	1932	1933	1934	<i>Calendar Year 1934</i>
U.K.	38.7	31.5	27.4	30.2	38.9	39.3	41.4
British Empire	45.6	39.3	36.6	38.0	46.9	48.0	51.3
U.S.A.	36.1	36.7	43.7	40.8	30.2	33.6	34.1
China	1.9	1.8	1.1	1.0	1.6	0.9	0.7
Japan	2.6	3.1	2.4	2.9	2.2	2.4	2.5

Trade with China and Japan is thus as yet an insignificant part of the whole. Japanese imports from Canada now consist to the extent of 90 per cent. of wheat, fish, lumber, pulp, newsprint, lead, and zinc, most of which originate from the Western coast of Canada, and are shipped from Vancouver and Prince Rupert, ports which have developed as important grain termini for shipments across the Pacific. China, for her part, takes Canadian aluminium, nickel, printing, and newsprint paper and, spasmodically, Canadian shipments of wheat. Although the foundation exists for an expanded reciprocal trade between Canada and Japan, its development is not likely to be rapid unless Canadian duties are materially lowered against imports from Japan. In this respect Canada is, of course, on a somewhat different footing from Australia or New Zealand. Her need to find overseas markets for foodstuffs and raw materials is less imperative, and having regard to her own industrial development and her close commercial relations with the United States, the incentive to make concessions to encourage Japanese trade is obviously less strong. On the other hand, as so great a producer of wheat, she may well find the economic link with the 'hungry' countries of the Western Pacific automatically developing.

We have now considered, as fully as space permits, the influence of Japanese industrialization on the trade relations of the British Dominions. It is too early to discern with any certitude the shape which Dominion trade will take under the pressure of this influence, but the observable

trends are sufficient to show that Japan is becoming for them an increasing magnet of trade.

The forces working towards deviation of the Dominions' trade in primary products come, however, not only from one side. While new channels are being opened for trade by Japan's expansion in the East, the older channels are showing signs of silting up in the West. The industrial countries of Europe are, with very little exception, following a policy of protection and encouragement of home agriculture and the reduction of imports of food. It is a significant fact that the agricultural workers of the eight most important European 'industrial' countries (Great Britain included) number no fewer than 32 million (compared with less than two million in Australia, New Zealand, and Canada); account must also be taken of the tendency towards European regional agreements for reciprocal trade between these 'industrial' countries and their 'agricultural' neighbours, creating a greater degree of self-sufficiency for Europe taken as a whole. Reduction of imports of foodstuffs by the countries of the Continent has resulted, in turn, in swamping Great Britain with Dominion produce, thus lowering British prices, depressing the British farmer, and creating pressure on the Government to save the latter's position by limiting imports from overseas.

To realize the seriousness for the food-producing Dominions of restrictions imposed by Great Britain, one must take note of the pre-eminent position of the United Kingdom as a market for their foodstuffs. Taking the seven most important 'industrial' countries on the Continent of Europe, we find that in 1933 the value of their aggregate imports of foodstuffs was just short of £290 million; the corresponding imports into Great Britain alone amounted to £334 million. If a similar comparison were made taking account only of the chief food products of the Pacific Dominions—meat, wheat, and butter—the relative importance of the British market would, of course, be much higher still.

In the buying of Dominion exports, it is true that direct competition between Japan on the one side and Great

Britain and Europe on the other applies less in the field of foodstuffs than of the raw materials of industry. Here the requirements of the United Kingdom compared with the rest of Europe are proportionately not so great, the 1933 figures for the value of imports of raw materials being, for the group of continental countries, included in the former calculations £520 million, and for Great Britain £200 million. It is also a fact that the efforts to stimulate national production in the case of foodstuffs have been less pronounced than in that of most classes of raw material. Nevertheless restrictions on the importation of the latter are having an active effect—Germany, for instance, having during the first nine months of 1934 imported 62 per cent. less wool than in the same period of the preceding year. The reciprocal trade arrangements inside Europe referred to already also affect raw material imports as well as those of food.

Thus, through the shrinkage of 'Western' markets, the Dominions find themselves under considerable pressure to find substitute markets for their primary products in other parts of the world and there is an impulse from both sides to develop new trade links with the industrializing countries of the East. Against this disturbing force has to be weighed first the strength of the belief held in some quarters that the present state of affairs is probably transient and that the old economic links will of themselves revive once the present stringency is past, and secondly the effects of adherence to the general principle of 'trading within the Empire'. This principle took concrete form in the Ottawa Agreements of 1932, when Great Britain had so far abandoned her traditional Free Trade policy as to be able to offer reciprocal preferences. The attempt at Ottawa to develop imperial trade was subject, however, to definite qualifications. Mr. Baldwin, when speaking at the Conference, pointed out that a country in Great Britain's position could not sacrifice world markets for the promise of increased Empire trade, however much this might develop. The Dominions on their side emphasized strongly the claims of their home industries and their need of developing

trade with newer industrial countries as well as of maintaining essential economic relationships with their immediate neighbours, as in the case of Canada and the U.S.A. Since then, moreover, the difficulties of anything like a closed system of trade for the British Commonwealth has been further emphasized by the urgent need felt by Great Britain of coming to mutual arrangements with some of her chief customers outside the Empire, both in South America and in Europe, and at the same time of encouraging agricultural production in Great Britain itself. British Government support of the home meat industry may, for instance, result in obliging the Australian or New Zealand producer to try to expand his exports to Japan (where meat consumption shows a tendency to increase), thus adding to the strength of the trade link between the respective countries. To quote once again from the Bank of New South Wales Circular for March 1934, dealing with trade development between Australia and Japan:

‘In British countries, the talk often centres around the possibility of organizing the British Empire as an economic unit. Many have doubted the desirability of any such objective, and even if it were desirable, it is extremely doubtful if it is possible. The trend in Great Britain towards a diminution in imports of foodstuffs raises still further difficulties, and in face of the rapid growth of Japanese industry, it is difficult to resist the conclusion that any survey of the rational ends of Australian trade policy in the circumstances of to-day must offer a more prominent place to interchange of goods with the East than it has occupied in the past.’

It is arguable, as was pointed out in the Introduction to this book, that all increases in the total volume of trade are, on a long view, universally beneficial and that new trade connexions between Eastern countries engaged in industrial development and those countries which are able to supply them with the raw materials they need will supplement world trade to the common advantage of all. But this implies the assumption that world conditions will admit of the automatic redistribution of trade and of the development of new ‘triangular’ relationships enabling a country which has lost ground in one of its trade connexions to

recoup itself by entering into others. Such adjustments are dependent on trade being free to follow its natural course. With the present prevalence of artificial restrictions it becomes a matter of doubt whether exporting countries which may have suffered diversion of trade can count upon such adjustments taking place within a practical time limit.

CONCLUSIONS

An Economist's Comment

By PROFESSOR T. E. GREGORY

THE reader of the preceding pages will have surveyed a vast range of facts and have been brought face to face with a whole series of different problems, some peculiar to this area or that, others which are common to all the Eastern countries, and others, again, which primarily affect the relationships between East and West. It is not my object in this concluding section of the volume to traverse facts or problems already dealt with in detail previously: or to attempt to summarize the content of previous chapters: my aim is rather to comment upon the material so presented from the standpoint of an economist.

It is said, and in some sense rightly said, that the fundamental problem with which this world is confronted when the relationships between East and West are discussed, is the 'industrialization' of the East. But this statement does not in reality take one very far: for the process of Eastern industrialization does not, in and of itself, necessarily raise any problems, except such as inevitably mark the internal strains—moral, economic, and sociological—set up by a revolutionary change in a society which has been relatively static for many generations. In reality the problems of the relationships between East and West, which our preoccupation with our own future inclines us to regard as the most important aspect of the process of Eastern industrialization, are peripheral: peripheral not only in the sense that they are a result of a much wider series of phenomena, but also in the sense that they are not necessarily permanent in character, whereas the phenomena which cause them *are* permanent. The industrialization of the East is and must remain a profoundly important event, even though the problems of the relationship between East and West raised by this industrialization prove capable of solution. Or, to state the whole matter in terms of value, we must not judge

the 'Industrial Revolution' in the East merely in terms of the embarrassments which it may occasion to Western interests and Western industries. In any case, as will speedily become clear, the influence of Eastern industrialization upon the outside world is very complex: there are elements of immediate advantage, as well as of disadvantage, which have to be taken into account.

In order to make the fundamental point clear, let us begin by recalling the economic history of the West since the opening up of the Americas—a period roughly coincident with the growth of large-scale industry, the extension of the system of division of labour nationally and internationally, and the rise of 'Capitalism' as a social system. The ultimate economic result has been a twofold one: there has been both an enormous growth of population and a considerable rise in the standard of life *per capita*. The relationship between population growth and industrialization has been a complex one: 'with every mouth God sends a pair of hands'; and if the power-loom and the factory provided additional means of employment, it is equally clear that the growing pressure of population was the cause, at least in part, of agricultural improvement and technical advance. At any rate, technical progress and population movement have been sufficiently in equilibrium to permit of a substantial improvement in average well-being in spite of the dissipation of resources through war and not infrequent mal-investment. This being the history of the West, what is the history of the East? In some cases, as in India, growing population—due to Western hygiene and Western methods of government—is forcing on industrialization: in other cases, as in Japan, industrialization—perhaps as a result of conscious imitation—is providing the means of additional employment. Whatever the causal sequence may be, it is clear that we should view the Eastern scene in the light of our own historical experience and recognize that the ultimate condition for a rise in the Eastern standard of life is such a balance between population growth and technical progress as to permit of a surplus which will raise the *per capita* welfare of Eastern populations. The attainment of this surplus

is theoretically possible by a drastic decline of population: given the population situation, it is only possible to solve it by means of industrialization. Nor is there anything of a sinister or pessimistic nature in this conclusion, as such. For a growing population with growing resources represents a growing market: in fact, the East is reproducing the conditions which made for the most rapid economic growth in other parts of the world in a not very remote past.

It is part of the fashionable pessimism of the age to hark upon the disadvantages (after having only a short while ago dilated upon the advantages) of a stationary population. Productive capacity and inventiveness are constantly growing; but where are the consumers who will take off the market the out-put of the 'mass-production' industries? This fear that there will not be a market—erroneous as it is—is responsible in the West for a growing volume of suggestions by which the 'fatal dilemma' can be overcome: they reduce themselves in the main to various devices for maintaining 'mass purchasing power'. Now, in the East the situation differs in this important respect—there is no lack of a market, in the sense that there is an insufficient number of potential consumers; what is lacking is the means to satisfy their requirements given the existing productivity. To raise their standard it is necessary to increase productive equipment—and that is to industrialize.

Important consequences follow from this simple, indeed obvious, statement. First, the process of industrialization involves capital accumulation: the supply of savings can come either from 'forced savings' (i.e. inflation which has the effect of reducing the standard of life for the time being), from the profits or other income-receipts of the local populations, or from abroad. A complete industrialization of the East would obviously involve enormous sums, only a portion of which can be supplied locally. In any case, the more slowly the supply of capital trickles in, the slower the industrialization process. The conclusion seems obvious that either the process of industrialization will take decades

to accomplish, so that the dreaded complete supersession of the Western industrial system by the Eastern is on this (as well as on other) grounds a chimera, or, if the pace of industrialization is to be accelerated, Western capital must assist. This process of assistance has a twofold effect—a financial and a 'real' one. Financially, in so far as interest must be paid if the money is to be forthcoming, Eastern industrialization must involve a stream of income flowing to the West. Even if the goods representing this interest are competitive with Western goods, the receipt of income involves the possibility of additional expenditure in *some form* by the recipients. The 'real' aspect of the industrialization process is provided by the circumstance that the further the process goes, the greater the demand for capital goods, both quantitatively and qualitatively. It thus appears erroneous to suppose that the process of industrialization will have no directly favourable repercussions on Western industries, since these are, *ex hypothesi*, in a more advanced state and therefore are indispensable to the less advanced areas.

Secondly, a rising standard of life and growing industrialization involves growing dependence on outside areas for raw materials and foodstuffs not available at all, or so cheaply, in the East. The importance of Japan as a market for certain materials, e.g. wool, has been stressed already in previous chapters in this book and the point need not be laboured here. But again it follows that a growth of the consuming power in the East, conditioned by industrialization, is by no means inimical to the welfare of certain portions of the Western world.

Thirdly, a growth in the aggregate consumption of a given area—such as that now under consideration—implies an addition to the existing volume of consumption; even the industrialization of the East does not necessarily involve any fall in the aggregate exports, even of competitive goods, to that area. There is no upper limit to the increase in *per capita* consumption, and even if there were, it has certainly not yet been attained and is not likely to be for many decades to come. There is not the slightest incompatibility, in

principle, between the industrialization of the East and an increase in aggregate exports to the East, not merely in aggregate exports of capital goods and raw materials, but of aggregate exports of finished (and in certain cases of competitive) goods. Given an expanding volume of production, a rising standard of life, the existence of local differences of costs and productive possibilities, then not only is international trade possible, but it is capable of indefinite expansion. It is no mere coincidence that the greatest growth of international trade generally took place in the nineteenth century, when population and production were also expanding fast. Moreover, this growth of international trade took place, not only between 'complementary' areas, but also (and markedly) between areas all of which were industrializing themselves, and which were capable of, and actually in, competition with one another.

What has so far been said is not a complete picture of the situation: it is intended solely to point the important truth that an expansion of production over a large part of the world, accompanied by expanding population and a rising standard of life, is not fundamentally inconsistent with the continued well-being of the rest of the world, or, indeed, with a growth of that well-being. But it does not in the least follow from this that such a development may not be permanently inimical to particular functions of the non-Eastern world, or that this development may not involve grave problems of inter-adjustment which, until they have taken place, may prove to be inimical to large portions of the non-Eastern world. These propositions may both be true but their truth does not invalidate the general conclusions set out above.

I do not think that it will be seriously maintained by any one that it is possible to stop the industrialization of the East, even if it were desirable on balance to do so, or that it is really a long-run evil to permit the extension of the technical apparatus which alone—given the fact of population pressure—is capable of raising the standard of life in the East. All the difficulties which arise therefrom—and they must be frankly faced—should be judged in the light

of this fundamental truth. Enough has already been said to show that even in the short run not *all* the repercussions are unfavourable, but it now remains to deal with the less favourable aspects of the situation.

'Foreign Competition' can take three main forms: intrusion of the home market, replacement of export goods from one country by export goods from another, and finally extrusion from a particular market of goods domestically produced for that market. If the forms of competition vary, the cause of intensified competition is always the offer of the same or a competing article at a more attractive price—though the price may be more 'attractive' not because local selling costs are necessarily lower, but because tariffs and other impediments to free movement raise the cost of the extruded article to the consumer. From the standpoint of the less successful competitor, extrusion from a given market involves the discovery of alternative markets, the lowering of costs so as to win the market back, the discovery of alternative products to which capital and labour, no longer able to compete in the old directions, can be diverted, or, finally, the unemployment of the capital and labour involved; and it is clear that this last alternative is generally the first, and *may* be the final result of intensified competition. The lower costs which cause this displacement are not to be thought of as measured simply in terms of a low standard of life; the problem is much more complex. It is costs per unit of output that matter, and low unit costs may be the result of exceptionally low wages accompanied by a less than proportionately low standard of efficiency. But low unit costs may equally well be the result of a rising standard of wages, accompanied by efficiency rising more than in proportion. 'Efficiency' is itself a complex idea since the efficiency of labour obviously depends in part—and to a growing extent—upon the equipment with which the labourer works. Moreover, in all cases of competition it is not the *absolute* level of unit costs which matter, but the *relative* level.

It has been necessary to say so much in order to make it clear that the problem of intensified Eastern competi-

tion cannot be summed up by referring simply to the 'starvation wages of the East' and that the impact of intensified Eastern competition varies from case to case, according to the different conditions prevailing in given industries and consumer's markets. There is not, either in the East or West, a uniform standard of ways or of efficiency, so that generalizations as to the effect of Eastern competition are extraordinarily difficult, even on this ground alone. What is clear is that in certain cases, at any rate (especially in textiles), unit costs of production are considerably lower in Japan than in certain European countries, and since cotton textiles, in particular, are subject to conditions of greater inelasticity of demand (owing to the competition of rayon) than used to be the case, stagnation and retrocession in the cotton trade are directly connected with increased Japanese competition. But it is wrong to infer from this that what is true of cotton must also be true of all other industries, not only because cost conditions may be very different but also because demand conditions are different. Where an industry is working for an elastic market, the same industry may be expanding both in the East and the West, though it may be turning out different grades or qualities of the article. Moreover, though one industry may find its market eaten into, if that condition is accompanied by markedly lower prices, a margin of purchasing power is left over to be spent on other things, so that some other industry may directly benefit.

It may, however, be argued that the growing industrialization of the East (and particularly Japanese industrialization) will undermine the position of one industry after another—and enough has been said in a previous chapter to show how markedly Japan is progressing in varying directions. Is there not a danger that Western industry may in this way be completely annihilated? Any such idea is chimerical, and it is important that the fallacious nature of the argument should be understood. Firstly, if *all* Eastern industries were uniformly superior in efficiency to Western industries, all international trade between East and West would come to an end: a conclusion which

follows directly from the classical theory of international trade. If, for example, it costs Japan half as much to produce anything and everything at home as it costs to produce anything and everything in the West, it would not pay Japan to buy anything whatever in the West and so it would be impossible, in the long run, for the West to buy anything from Japan. Given the actual facts, however, that the relations *inter se* of the cost of producing different articles in the East and the West are not uniform (whatever the absolute cost level may be in the areas) then trade becomes possible; and even though in the East the absolute level of costs may be lower than in the West, an exchange of products becomes possible, i.e. the East will continue to import not only those things which she cannot produce at all but also those things at which her advantages in production are least. Lastly, the argument assumes that there is nothing remaining to be produced—so that if the West were to be deprived of the production of the existing range of commodities, there are no alternative articles to be produced. Historically regarded, however, it is certain that one of the main factors forcing on new industries has been the supersession of older areas of production by newer and more efficient ones.

But it remains a fact that, whilst the fear of universal undercutting is fallacious, the emergence of new and aggressive productive areas forces upon the older areas the heavy burden of change and, from the human point of view, such change may be both difficult and painful. Nobody can look upon the relative decay of the Lancashire cotton trade without a sense of pity and dismay, and it is quite clear that though special factors may be operative in this case to make it untypical, public opinion in most countries is not prepared to allow the process of readjustment to go on without some attempt to influence it by governmental action, or by co-ordinated action on the part of those directly or indirectly affected. Now the appropriate technique must be affected by one's estimate of what the fundamentals of the Eastern problem are and by the range of considerations introduced into the weighing of the

problem. The preceding chapters have discussed the problem of administrative action in relation to the different areas of the East: here it appears necessary only to stress some general considerations.

Firstly, not only the position of threatened producers but also the attitude of consumers must be taken into account—for consumers may be interested in the development of the East not only as consumers but also as suppliers of the raw material which the East will increasingly require as industrial production expands. Secondly, restrictive legislation, whether by prohibition, quota, tariff, or voluntary agreement, is *prima facie* more justifiable where the demand for an article is inelastic than where it is elastic. Thirdly, where restriction or limitation of the importation of Eastern products is considered necessary, agreement among the producers themselves is likely to be both more flexible and less productive of ill-will than direct action by government. Fourthly, a check imposed on competition in one direction may merely mean an intensification of competition in some other direction. But above all, the attitude of governments and business men would be governed, as already said, by definite views as to the real implications of the process of Eastern industrialization. There is some reason to suppose—as the preceding chapters make clear—that the extent and rapidity of the process is being exaggerated by public opinion in the West, perhaps even in the case of Japan. However that may be, it is not the ultimate point to be borne in mind. Industrialization is the only possible solution for the appalling absolute standards of life in the East: it requires a degree of economic irrationality, of which the present writer is not capable, to regard the process as on balance undesirable. It follows that, difficult as the problems of adjustment may be, they remain subsidiary, not in the sense that solutions are easy to find, but in the sense that they flow from an historical process which cannot be resisted, and which ought not to be resisted.

BIBLIOGRAPHY

GENERAL (FAR EAST)

- GREAT BRITAIN: Department of Overseas Trade: Annual Reports by H.M. Trade Commissioners, Commercial, Diplomatic, and Consular Officers on Commercial and Financial Conditions in China, India, Japan, &c. London: H.M. Stationery Office.
- Report of the British Economic Mission to the Far East, 1930-1. 1931. London: H.M. Stationery Office. 156 pp. 2s. 6d.
- Report of the Cotton Mission, 1931. London: H.M. Stationery Office. 96 pp. 1s.
- BAIN (H. F.): Ores and Industry in the Far East. 1933. Enlarged and revised edition. New York: Council on Foreign Relations. Demy 8vo. xvi+288 pp. \$3.
- BARNES (J.), *ed.*: Empire in the East. 1934. New York: Doubleday, Doran. La. 8vo. vii+322 pp. \$3.25.
- FIELD (F. V.), *ed.*: The Economic Handbook of the Pacific Area. 1934. New York: Doubleday, Doran. London: Allen & Unwin. La. demy 8vo. xii+646 pp. Map. 18s.
- HOLLAND (W. L.), *ed.*: Commodity Control in the Pacific Area: a Symposium on Recent Experience. 1935. London: Allen & Unwin. California: Stanford University. Sm. roy. 8vo. 25s.

Problems of the Pacific:

1927. Proceedings of the Second Conference of the Institute of Pacific Relations. Edited by J. B. Condliffe. 1928. Chicago University Press. Cr. 8vo. ix+630 pp. 8 maps. \$3.
1929. Proceedings of the Third Conference. Edited by J. B. Condliffe. 1930. Chicago University Press. Cr. 8vo. 720 pp. \$5.
1931. Proceedings of the Fourth Conference. Edited by Bruno Lasker. 1932. Chicago University Press. Cr. 8vo. xxi+548 pp. \$5.
1933. Proceedings of the Fifth Conference. Edited by Bruno Lasker and W. L. Holland. 1934. Oxford University Press. Chicago University Press. Cr. 8vo. xiii+528 pp. 21s. \$5.
- THOMAS (Albert): Report on Labour Conditions in the Far East, submitted to the Governing Body of the International Labour Office. 1929. Geneva: International Labour Office. 20 pp.
- UTLEY (F.): Lancashire and the Far East. 1931. London: Allen & Unwin. 8vo. 395 pp. 16s.
- WINDETT (N.): Australia as Producer and Trader, 1920-32. 1933. London: Oxford University Press. Demy 8vo. xii+320 pp. 15s.
- International Federation of Master Cotton Spinners and Manufacturers Association, Manchester: International Cotton Bulletins (bi-monthly).

PERIODICALS:

- Japan Weekly Chronicle (Tokyo).
 — Commercial Supplement (Tokyo).
 Mitsubishi Circular: Mitsubishi Economic Research Bureau (Tokyo).
 The Oriental Economist (Tokyo).

CHINA

- Bank of China, Shanghai: Research Department: Position of China as a producer of raw material and consumer of manufactured products.
 — Annual Reports.
 China Year Book, Edited by H. G. Woodhead. London: Simpkin Marshall (annual since 1912).
 China: *in* Annals of the American Academy of Political and Social Science, November, 1930.
 FONG (H. D.): Cotton Industry and Trade in China. 1932. Tientsin: Chihli Press. La. 8 vo. 2 vols. 32s. 6d.
 HO (F. L.) and FONG (H. D.): The Extent and Effects of Industrialization in China. 1929. Tientsin: Nankai University. La. 8vo. 34 pp.
 KING (S. T.) and LIEU (D. K.): China's Cotton Industry (*in* Problems of the Pacific, 1929).
 LIEU (D. K.): A Preliminary Report on Shanghai Industrialization. 1933. Shanghai: China Council of the Institute of Pacific Relations. 8vo. 69 pp. 25 c.
 ORCHARD (J. E.): China as a Source of Iron and Fuel (*in* Japan's Economic Position. See below under JAPAN).
 PEARSE (A. S.): The Cotton Industry of Japan and China. 1929. Manchester: Taylor, Garnett & Evans. 8vo. 254 pp. 21s.
 SALTER (Sir A.): China and the Depression; Impressions of a three month's visit. 1934. China: National Economic Council.
 TAO (L. K.) and LIN (S. H.): Industry and Labour in China. 1931. World Social Economic Congress. 8vo. 64 pp.
 TAWNEY (R. H.): Land and Labour in China. 1932. London: Allen & Unwin. 8vo. 207 pp. 7s. 6d.
 VINACKE (H. M.): Problems of Industrial Development in China. 1926. Princeton University Press. Oxford University Press. 8vo. ix + 205 pp. 9s.
 WITTFOGEL (K. A.): Wirtschaft und Gesellschaft Chinas. 1931. Leipzig: Hirschfeld. 8vo. 767 pp. Rm. 32.

JAPAN

- Great Britain: Department of Overseas Trade: Report on the Cotton Spinning and Weaving Industry in Japan, by W. B. Cunningham. 1927. London: H.M. Stationery Office. 3s.
 United States: Department of Commerce: Trends in Japan's Trade. 1926.

- United States: Tariff Commission: Report of Japanese Cotton Industry and Trade. 1921.
- ALLEN (G. C.): Modern Japan. 1928. London: Allen & Unwin. 226 pp.
- ANDREADES (A.): Les Finances de l'Empire japonais et leur évolution. 1932. Paris: Alcan. Sm. 8vo. 202 pp.
- ASAHI (I.): The Secret of Japan's Trade Expansion. 1934. Tokyo: International Association of Japan. 8vo. 130 pp.
- CROCKER (W. R.): The Japanese Population Problem. 1931. London: Allen & Unwin. 8vo. 240 pp. 10s. 6d.
- Federation of British Industries: Report of Mission to the Far East, Aug.-Nov., 1934. 1s.
- International Labour Office: Industrial Labour in Japan. 1933. Geneva: I.L.O. London: P. S. King. 8vo. xvi+413 pp. 12s. 6d.
- Japan and Manchukuo Year Book. 1934. Tokyo: Japan and Manchukuo Year Book Company (annual).
- KENNEDY (M. D.): The Changing Fabric of Japan. 1930. London: Constable. 8vo. vii+282 pp. 16s.
- MAURETTE (F.): Social Aspects of Industrial Development in Japan. 1934. Geneva: International Labour Office. La 8vo. 69 pp. 1s. 3d.
- MOULTON (H. G.): Japan—an Economic and Financial Appraisal. 1931. Washington: Brookings Institution. 8vo. 645 pp. \$4.
- NASU (S.): Land Utilization in Japan. 1934. Chicago University Press. 328 pp. \$4.
- NITOBE (I.): Japan. (*Modern World Series*.) 1931. London: Benn. 8vo. 398 pp. 18s.
- ORCHARD (J. E.): Japan's Economic Position. 1930. New York: McGraw-Hill. 8vo. 504 pp. 25s.
- PEARSE (A. S.): The Cotton Industry in Japan and China (see above under CHINA).
- PENROSE (E. F.): Population Theories and Their Application: with special reference to Japan. 1934. California: Stanford University Press. 8vo. xiv+347 pp. \$3.50.
- Political and Economic Planning (P.E.P.): Report on the British Cotton Industry. 1933. London.
- REMER (C. F.): Foreign Investments in China. 1933. New York: Macmillan. 8vo. 708 pp. \$5. (See Chapter XVII: Japanese Investments in China.)
- STEIN (G.): Made in Japan. 1935. London: Methuen. 8vo. viii+206 pp. 7s. 6d.
- Tokyo Association for Liberty of Trading:
 Bulletin No. 2. Japan's Trade with Australia and New Zealand and its Future. 1934. Tokyo.
 Bulletin No. 3. Occupational Changes in Japan. 1934. Tokyo.
- YAMASAKE (K.) and OGAWA (G.): The Effect of the War upon the Commerce and Industry of Japan. (*Carnegie Endowment Economic and Social History of the World War Series*.) 1929. Yale University Press. Oxford University Press. La. 8vo. 405 pp. \$4.

Institute of Pacific Relations: Conference Data Papers.

ASARI (J.): Development of the Cotton Spinning Industry in Japan. 1931. Shanghai Conference.

INOUE (J.): The Economic and Industrial Development of Modern Japan. (Western influences in Japan No. 14.) 1929.

MORIMOTO (K.): The Efficiency Standard of Living in Japan. 1931. Shanghai Conference.

Supply of Raw Materials in Japan. By the Staff of the Tokyo Institute of Political and Economic Research. 1933. Banff Conference. 8vo. 23 pp. 20 c.

UYEDA (T.): Future of the Japanese Population. 1933. Banff Conference. 8vo. 25 pp. 20 c.

INDIA

Great Britain and India: Census of India, 1921 and 1931.

— Statistical Abstract of India (annual).

— Report on Moral and Material Progress of India (annual).

— Review of the Trade of India (annual).

— Reports of the Indian Trade Commissioner, India House (annual).

— Report of the Indian Fiscal Commission. Cmd. 1724 of 1922.

— Report (and volumes of evidence) of the Royal Commission on Agriculture in India. Cmd. 3132 of 1928.

— Report (and volumes of evidence) of the Royal Commission on Industrial Labour in India. Cmd. 3883 of 1931.

— Report (and volumes of evidence) of the Central Indian Banking Committee and of the Provincial Banking Committee 1932.

— Reports of the Indian Tariff Board, especially regarding:

The Grant of Protection to the Steel Industry 1924;

Statutory Inquiry into Steel Industry 1927;

Report on the Iron and Steel Industry 1934;

Statutory Inquiry into the Indian Cotton Mill Industry 1927.

— Report on the Working of the Scheme of Preferences resulting from the Agreement at Ottawa between India and H.M. Government in the United Kingdom, up to the end of the fiscal year 1933-4.

— Department of Overseas Trade. Reports on the Conditions and Prospects of British Trade in India (annual).

ANSTEE (V.): Economic Development of India. 1931. London: Longmans Green. 562 pp. Full bibliography. 25s.

BUCHANAN (D. H.): The Development of Capitalist Enterprise in India. 1934. New York: Macmillan. 482 pp. 21s.

DEY (M. L.): The Indian Tariff Problem. 1933. London: Allen & Unwin. 288 pp. 16s.

JAIN (L. C.): The Monetary Problems of India. 1933. London: Macmillan. 208 pp. 10s. 6d.

LOKANATHAN (P. S.): Industrial Organization in India. 1935. London: Allen & Unwin (*in the press*).

- PANANDIKAR (S. G.): Industrial Labour in India. 1933. London: Longmans Green. 294 pp. 9s.
- PEARSE (A.): The Cotton Industry of India: the report of a journey to India. 1930. Manchester: Taylor, Garnett & Evans. viii + 332 pp.
- UTLEY (F.): Lancashire and the Far East. (See above under FAR EAST.)
- WATTAL (P. K.): The Population Problem in India. 1934. Bombay: Bennett, Coleman. 185 pp. Rs. 3.80.

PERIODICALS AND JOURNALS:

- Asiatic Review (London).
 Bombay Labour Gazette.
 Capital (Calcutta).
 Indian Journal of Economics (Allahabad).
 Indian Trade Journal (Calcutta).

GREAT BRITAIN

- Great Britain: Annual Statements of the Trade of the United Kingdom.
 — Monthly Accounts of Trade and Navigation of the United Kingdom.
 — Committee on Industry and Trade: First Report. 1929 (Balfour Committee). Cmd. 3282. 338 pp.
 — Survey of Overseas Markets. 1925. 740 pp.
 — Survey of Industrial Relations. 1926. 497 pp.
 — Factors in Industrial and Commercial Efficiency. 1927. 544 pp.
 — Further Factors in Industrial and Commercial Efficiency. 1928. 360 pp.
 — Survey of the Metal Industries. 1928. 528 pp.
 — Survey of Textile Industries. 1928. 328 pp.
 — Reports of Investigations into the Industrial Conditions in Certain Depressed Areas. 1934. Cmd. 4728. 240 pp.
 — Statistical Tables relating to British Foreign Trade and Industry. 1924-30. 1930. Cmd. 3737. (2 vols.)
 — Ministry of Labour Gazette (monthly).
 — Royal Commission on the Coal Industry: Final Report 1926. Cmd. 2600. 294 pp.
- League of Nations: World Economic Survey 1931-2. Geneva 1932. 327 pp.
 — World Economic Survey 1932-3. Geneva 1933. 345 pp.
 — World Economic Survey 1933-4. Geneva 1934. 365 pp.
- ALLEN (G. L.): British Industries and their Organization. 1933. London: Longmans Green. 338 pp. 10s. 6d.
- BOWLEY (A. L.): Some Economic Consequences of the Great War. (*Home University Library*.) 1932. London: Butterworth. Sm. 8vo. 251 pp. 2s. 6d.
- CLARK (C.): Statistical Studies regarding the Present Economic Position of Great Britain (in the *Economic Journal*, September 1931).
- CLAY (H.): The Post-War Unemployment Problem. 1929. London: Macmillan. 317 pp. 8s. 6d.

- CLAY (H.): *The Problem of Industrial Relations*. 1929. London: Macmillan. 317 pp. 12s.
- DANIELS (G. W.) and JEWKES (J.): *The Comparative Position of the Lancashire Cotton Industry and Trade*. 1927. Manchester: John Heywood, Ltd. 101 pp.
- ELLINGER (B. H.): *Japanese Competition in the Cotton Trade* (in the *Journal of the Royal Statistical Society*, part ii, 1930).
- FLORENCE (P. Sargent): *The Logic of Industrial Organization*. 1933. London: Kegan, Paul. 291 pp. 10s. 6d.
- HILTON (J.) and others: *Are Trade Unions Obstructive?* 1935. London: Gollancz. 349 pp.
- HOBSON (C. K.): *The Export of Capital*. 1914. London: Constable. 261 pp.
- KINDERSLEY (R.): *British Foreign Investments in 1928* (in the *Economic Journal*, June 1930).
- LOVEDAY (A.): *Britain and World Trade*. 1931. London: Longmans Green. 229 pp. 10s. 6d.
- McCALLUM (E. D.): *The Problems of the Depressed Areas in Great Britain* (in *International Labour Review*, August 1934).
- MARQUAND (H.): *The Dynamics of Industrial Combination*. 1931. London: Longmans Green. 206 pp.
- MEAKIN (W.): *The New Industrial Revolution*. 1928. London: Gollancz. 284 pp. 9s.
- PIGOU (A. C.): *The Economic Position of Great Britain*. 1927. Royal Economic Society Memorandum.
- Political and Economic Planning (P.E.P.): *Report on the Cotton Industry*. London, 1934.
- *Report on the Iron and Steel Industry*. London, 1934.
- The Post-War Depression in the Lancashire Cotton Industry (in the *Journal of the Royal Statistical Society*, part ii, 1928).

INDEX

Act of Algeciras: 23.
 Aden:
 Chinese trade with: 192.
 Aeroplanes:
 manufacture in China: 193.
 Africa: xxi, 51 *sq.*, 159; copper production: 139; British trade with: 326; Indian trade with: 241, 298; Japanese competition: 327.
 Africa, East: 17, 266, 280; increase of Japanese trade with: 7, 19; British trade with: 327; Chinese trade with: 192; Indian trade with: 274.
 Africa, North: 15.
 Africa, Portuguese: 24.
 Africa, South:
 British trade with: 327, 348; Japanese trade with: 7, 16, 26, 355 *sq.*
 Africa, West: 17, 19, 266.
 Africa, West, French: 24.
 Agriculture: 16, 109, 114, 125, 131 *sq.*, 145 *n.*, 149, 163 *sq.*, 166, 173, 181, 196 *sq.*, 199, 205, 212, 220 *sq.*, 232 *sq.*, 248, 261, 285, 302, 309, 335 *n.*, 350, 359, 364; fall in produce value: 214, 287; relief of: 105, 107 *sq.*, 170, 172.
 See also PLANTATION INDUSTRIES; POPULATION; SUBSIDIES; and individual subjects.
 Ahmedabad: 258 *and n.*, 291.
 Ahmedabad Mill Owners' Association: 279 *and n.*
 Alcohol: 201.
 Algeria: 23.
 Aluminium, *see* METALS.
 America, *see* UNITED STATES.
 America, Central:
 Japanese trade with: 26.
 America, North:
 trade with the East: 348.
 America, South:
 British trade with: 361; copper production: 139; Japanese trade with: 7, 25 *sq.*, 51, 355.
 Anglo-Chinese Kailan Mining Administration: 231.

Anglo-Japanese Conventions, *see* COMMERCIAL NEGOTIATIONS.
 Anshan: 136.
 Anthracite, *see* MINING INDUSTRY.
 Antimony, *see* METALS.
 Arabia:
 Indian trade with: 274.
 Argentine: 22, 26 *sq.*; British trade with: 326.
 Armaments: 7, 57, 66.
 Artificial silk, *see* RAYON.
 Asia: 182, 348; decline of British cotton markets: 327.
 Asia Minor: 15.
 Associated Australian Chambers of Commerce: 354.
 Atlantic: 348.
 Australasia:
 British trade with: 326.
 Australia: 16, 22, 60, 267, 271, 349, 356, 358 *sq.*, 361; reciprocal trade with Japan: 25 *sq.*, 61, 161, 348, 350 *sq.*, 357; export of wheat: 148, 353; wool output: 221; effects of Great War on industry: 347; balance of trade: 352; trade with China: 353; mission to Japan: 353 *sq.*; Japanese Trade Delegation: 354.
 Baldwin, Mr.: 360.
 Balfour Committee: 316, 331.
 Balkans:
 Japanese trade with: 25 *sq.*
 Bank of China: 189, 215 *sq.*
 Bank of England: 327.
 Bank of Japan: 52, 105, 111, 168; founding of: 47.
 Bank of New South Wales: 355, 357.
 Barakar: 243.
 Batavia: 9.
 Bauxite, *see* MINERALS.
 Beer: 9.
 Belgium: 23, 59 *n.*, 250, 283.
 Belgian Congo:
 Japanese trade with: 24.
 Bengal: 243.
 Bengal Iron Company: 281 *n.*

- Berlin: 17.
 Berlin, Treaty of, *see* COMMERCIAL NEGOTIATIONS.
 Bhoré, Sir Joseph: 272.
 Bicycles: 19, 24, 126, 128, 268.
 Bihar: 243.
 Bombay: 246, 258 *n.*, 273, 276, 285 *sq.*, 302.
 Bombay Cotton Mill Industry: 264.
 Bombay Mill Owners' Association: 279.
 Bombay Presidency: 248, 250, 290.
 Bonuses, *see* WAGES.
 Bounties, *see* SUBSIDIES.
 Bradford Dyers' Association: 91.
 Brazil: 27, 60.
 British American Tobacco Company: 193.
 British Hosiery Manufacturers' Federation: 56.
 British Indian Act: 290.
 British Malaya: 17, 161; Japanese trade with: 19.
 British Somaliland: 17.
 Broach: 243.
 Bureau for the Rationalization of Industry: 69 *sq.*, 72 *sq.*;
 Committee on Control: 70 *sq.*;
 Committee on Control of Sales: 70;
 Committee for Encouragement of Consumption of Home Products: 70.
 See also STAPLE INDUSTRIES CONTROL ACT.
 Burma: 303; oil fields: 246.
 Business Tax: 234 *n.*
 Butter:
 Australian export of: 350.
 Calcutta: 60, 243, 285.
 Calico Printers' Association: 224, 322.
 Canada: 55, 142, 148, 250, 267, 315 *n.*, 359, 361; Japanese trade with: 16, 355, 358; coal output: 219; effects of Great War on industry: 347, 357; trade with China: 353, 358; trade with United States: 358; Pacific trade development: 357 *and n.*, 358.
 Canned goods: 23.
 Canton: 192, 216.
 Capital, Industrial, *see* FINANCE.
 Carpet industry: 197, 223, 268.
 Cartels: 55, 70 *sq.*, 75 *sq.*, 90, 328, 330.
 Casablanca: 24.
 Cement: 9, 47, 71, 73, 75, 204, 253, 260, 294, 300.
 Cereals: 10. *See also* WHEAT.
 Ceylon: 17 *sq.*, 280; Indian trade with: 274, 298; Japanese trade with: 19, 25; opposition to quota policy: 20, 280 *n.*
 Chahar: 220.
 Chartered Companies, *see* TRADE, INTERNATIONAL.
 Chemical Manufactures: 51 *sq.*, 56, 73, 196, 252, 263, 295 *and n.*, 296, 300;
 Ammonium-sulphate: 201;
 Dyes: 52, 160 *n.*, 183, 252;
 Fertilizers: 47, 75, 147 *n.*, 233;
 Magnesium chloride: 267 *n.*
 Chile:
 Japanese trade with: 26.
 China: xix *sq.*, 1, 7, 45 *sq.*, 51, 58 *sq.*, 61, 63, 75, 80, 83, 134, 136, 159, 240, 246, 250, 253, 285, 287, 289 *and n.*, 291, 293, 298 *sq.*; boycott on Japanese goods: 6, 9 *sq.*, 25;
 Foreign trade, its unimportance to China: 182; expansion by railway extension: 184, 238; change of markets: 348; trade relations with Japan: 235 *sq.*, 236 *n.*, 238;
 Great War, its effect on trade: 198; decline in British cotton exports: 326;
 Industrial development: 193-8, 200, 203, 213, 215, 217, 222, 229 *sq.*, 232 *sq.*, 238; rural industries: 197; foreign technical training: 194 *sq.*; decentralization: 196 *sq.*; mechanization of industry: 196; factory development: 10, 183 *sq.*, 186 *sq.*, 198, 204 *sq.*, 229, 237; electrification of: 84; organization of: 225 *sq.*; deficiency in factory plant: 231;
 Relations of State to industry: 199-205; industrial legislation: 203 *sq.*, 231, 234 *and n.* Chinese and foreign partnership in industry: 231; home market: 232 *and n.*, 233;

China:—*cont.*

Sino-Japanese War, 47 *sq.*, 186;
Standard of living: 206, 208 *sq.*;
Trade balance: xix *sq.*, 185, 229,
238;

Trade with Australia: 354 *sq.*;
Canada: 358; Japan: 156, 176,
232.

Treaty Port System: 181, 186,
194 *sqq.*, 199, 205, 238; organiza-
tion of: 226 *sq.*; attitude of State
to foreign enterprise: 234 *sq.*;
foreign-owned factories: 187, 195,
198 *sq.*, 205 *sq.*, 222, 225 *sq.*, 228,
233 *sqq.*, 238, 273, 277; extra-
territorial rights: 181, 200, 234 *sq.*,
238 *sq.*;

See also COTTON; CURRENCY; EX-
PORTS; IMPORTS; JAPAN; MAN-
CHURIA.

China Development Finance Cor-
poration: 231.

Chinaware: 182, 265, 351.

Chinese Cotton Mill-Owners' Associa-
tion: 233 *sqq.*

Chinwangtao: 216.

Cigarettes: 187, 193, 198.

Clare Lees, Sir William: 278.

Clothing: 23.

Clyde: 331.

Coal, *see* MINING INDUSTRY.

Coal Mines Act: 330.

Coastal and River Services, *see* TRANS-
PORT.

Commercial Negotiations:

Anglo-Japanese Convention (1905):
280;

Anglo-Japanese Negotiations (1934):
17, 25, 279;

Congo Basin Treaties: 280 *n.*;

Crisis Import Ordinance: 9;

Indo-British Trade Agreement
(1935): 266 *sq.*, 272, 278 *sq.*, 283,
303;

Indo-Japanese Trade Convention
(1904): 264, 277; (1933): xxii, 9,
13, 268 *n.*, 269, 271, 277; (1934):
13 *sq.*, 86, 265, 275, 277;

Japan-Australia: xxii;

Japan-Great Britain (1933): xxii;

Japan-Netherlands East Indies:
xxii;

Ottawa Agreements: 16, 264 *sqq.*,
267, 271, 304, 349, 360;

Sino-Japanese Treaty (1930): 201 *n.*;

Treaty of Berlin: 17;

Washington Conference: 201.

See also COTTON; TARIFFS.

Committee on Control, *see* ENCOURAGEMENT OF
Consumption of Home Products,
see BUREAU FOR THE RATIONALI-
ZATION OF INDUSTRY. 7

Committee on Control, *see* BUREAU
FOR THE RATIONALIZATION OF
INDUSTRY.

Committee on Control of Sales, *see*
BUREAU FOR THE RATIONALIZA-
TION OF INDUSTRY.

Communism: 130, 210.

Congo Basin: 17.

Congo Basin Treaties, *see* COM-
MERCIAL NEGOTIATIONS.

Copper, *see* MINING INDUSTRY.

Cost of living, *see* WAGES.

Cotton: 76, 78, 81, 85, 88 *sq.*, 91,
133 *n.*, 134, 154, 156 *sq.*, 159 *sq.*,
162, 167, 168, 176 *sq.*, 183, 186,
191, 198, 201, 204, 207 *sq.*, 216,
218, 220 *sq.*, 223, 233, 242,
247 *sqq.*, 252, 260, 287, 293, 296,
298 *sq.*, 315 *sq.*, 319, 321, 327,
337 *n.*, 369; negotiations between
Japan, India, and Great Britain:
71; Colonial trade: 278, 280, 327;

Lancashire trade, reorganization
schemes: xxii, 324, 339; Japanese
competition: 20, 112, 278, 328
sq.; undercut by rayons: 22,
91 *sq.*; Indian and Japanese com-
petition: 273, 275, 288; cause of
loss of trade: 86; decline of
Moroccan market: 23; India's
loss of markets to: 241, 307; her
relations with Lancashire: 278;
depression in Lancashire in-
dustry: 320, 370; number of
spindles reduced: 323 *n.*, 324,
328; reduced production: 328;
reduction of costs: 329;

Piece goods: xx, 10 *sq.*, 13 *sqq.*,
17 *sqq.*, 21 *sqq.*, 24, 26, 53, 55,
63, 84, 115, 120, 123, 182 *sqq.*,
185, 190 *sq.*, 202, 232, 246, 250,
261 *sqq.*, 264, 267, 269, 273 *sq.*,

Cotton:—*cont.*

278, 280, 294, 325; duty on: 12; regulation of Indian import of, 13; opening of market in Korea: 50;

Raw cotton: 10, 13 *sq.*, 25 *sq.*, 81 *sq.*, 84 *sq.*, 88, 98 *sq.*, 121, 183, 185, 202, 216, 221, 226, 249, 256, 266 *sq.*, 268 *and n.*, 270 *n.*, 276 *sq.*, 280, 298 *sq.*, 324 *and n.*;

Spinning industry: 47, 49, 51, 54, 71, 79, 82, 112, 121 *sq.*, 134, 190, 204, 210, 339;

Weaving industry: 7, 56, 79, 81 *sq.*, 84, 112, 122, 134, 158, 189 *sq.*, 210, 339;

Yarn: 49, 51, 63, 84, 120, 183 *sq.*, 189, 232, 241, 246, 249 *sq.*, 262, 272, 275 *sq.*, 278, 299;

China, effect of growth of native industry: 10 *sq.*; export of 'nan-keen': 182; power-driven spindles: 183, 187, 238; increase of cotton mills: 184, 187; cultivation of cotton plant: 184; cotton crisis: 189; reduction of output: 189; hand-loom industry: 196, 198, 238; mill machinery in China inferior to that of Japan: 231;

India, power spinning: 183 *and n.*; loss of European markets: 241; first spinning mill established: 243; expansion of home markets: 249 *sq.*, 272; hand spinning industry: 241, 249, 274; loss of foreign markets: 241;

Japan, growth of exports: 5, 11, 50 *and n.*, 51; introduction of cotton plant into: 46; of spinning machinery: 49; rationalization and reorganization of industry: 54; methods of purchase: 83 *sq.*, 88; Japanese mills in China: 83, 226; advantage in technical equipment: 85 *sq.*, 87 *sq.*, 114; centralization of marketing agencies: 88; increase of efficiency: 119 *sq.*; expansion in Asiatic markets: 160.

See also PRICES; PRODUCTION; STATISTICS; TARIFFS; TEXTILES; TRADE.

Cotton Industry Commission: 202.

Cotton Textile Industrial Guilds, Federation of: 75.

Cotton Trade Organizations, Joint Committee of: 121, 123 *n.*

Crisis Import Ordinance, *see* COMMERCIAL NEGOTIATIONS.

Currency:

Copper coinage in Japan: 45; in China: 213;

Deflationary policy: 78 *sq.*, 104, 114, 158, 320; depreciation, silver: 6, 62; its effect on industry: 93-104, 353;

Embargoes on gold exports: 52, 95, 97, 100; on silver exports: 186, 212; emergency currency: 258 *n.*; exchange policy of Japan: 96 *sq.*; Fluctuations: 10, 93, 99 *sq.*, 104, 193, 211 *sq.*, 214, 229, 283; comparisons of value of the yen: 96; depreciation of: 268, 273, 275, 277; foreign exchange: 212;

Gold Standard, America's departure from: 100; Great Britain's departure from: 94, 100; her return to: 320; Japanese departure from: 57, 93 *sq.*, 97, 99 *sq.*, 158; her return to: 62;

Inflationary policy: 111, 152, 157 *sq.*;

Opium as currency in China: 182;

Paper currency: 213, 214 *and n.*;

Silver, appreciation: 208, 212, 215, 229 *n.*; bullion: 182, 186, 213; purchasing policy of the U.S.A.: 212;

Stabilization, on gold basis: 47, 245; of rupee: 275; its decline in gold value: 245;

Substitution of the dollar for the tael: 213 *sq.*

See also FINANCE; STATISTICS; TARIFFS.

Curzon, Lord: 261.

Cyprus: 17.

Dai Nippon Spinning Company, *see* DAI-NIPPON BOSEKI KABUSHIKI KAISHA.

Daimyos: 46.

Dai-Nippon Boseki Kabushiki Kaisha: 82, 226.

Daniels, Professor: 319.

Debt, *see* INTERNAL DEBT; NATIONAL DEBT.

Durham: 340, 343.

Dutch East Indies, *see* NETHERLANDS EAST INDIES.

Duties, *see* TARIFFS.

Dyes, *see* CHEMICAL MANUFACTURES.

East India Company:

Trade monopoly and trading powers removed: 240.

East Indian Railway: 243.

East Indies: 159; cotton trade: 241.

Education:

China: 197;

India: 244, 262;

Japan: 244.

Egypt: balance of trade: 15; British trade with: 327; Chinese trade with: 192, 221; Japanese trade with: 7, 15, 22, 26.

Electric motors: 143.

Electric power: 140, 231.

Production and distribution of: 55, 142, 196;

Chinese hydro-electric power: 219;

Indian: 246, 294; Japanese: 142 and *n.*, 143.

Electrical industry: 11, 23, 48, 60 *sq.*, 126, 139, 160, 315, 334.

Embargoes, *see* FINANCE.

Emigration: Japan: 133, 167.

See also POPULATION.

Engineering: 135, 139, 161 *sq.*, 184, 193, 243, 246, 253, 294, 310, 316, 337 *n.*;

'Central Machine Shop': 201.

Europe: 75, 296, 298, 348 *sq.*, 359 *sq.*; British trade with: 326, 361; regional agreements for reciprocal trade: 359.

Ewo Cotton Mills Company: 225, 227.

Expenditure, *see* FINANCE.

Export Guilds Law: 72, 169.

Exports:

Africa, South: 356; America, South: 27; Argentine: 27; Australia: 161, 348, 350 *sq.*, 354 *sq.*, 361;

Belgium: 23; Brazil: 27; British Malaya: 161;

China: 63 *n.*, 86, 181 *sq.*, 184 *sq.*, 191 *sq.*, 197, 202, 218 *sq.*, 221, 234;

Egypt: 15, 26;

Formosa: 150; France: 23, 310;

Germany: 8, 310; Great Britain: xx, 8, 9, 19, 23, 61, 191, 298, 308, 310, 314, 320, 324 *sq.*, 327, 330, 333, 346, 347 *sq.*, 350; fall of exports to India: 12 *sq.*

Holland: 9;

India: 8, 86, 242, 245, 249 *sq.*, 252, 261, 266, 276, 282, 294, 297 *sq.*, 304; Italy: 23;

Japan: xix, xxi, 1 *sq.*, 8, 10 *sq.*, 13 *sq.*, 16 *sq.*, 19, 21, 23 *sq.*, 26, 48 *sq.*, 52 *sq.*, 56, 60 *sq.*, 63, 82, 112, 126, 133, 151, 157 *sq.*, 182, 184, 191, 265, 333, 351, 353 *sq.*, 357; Government control of exports: xxii; effect of Chinese boycott on: 6; expansion in world markets: 7, 20, 27, 52; increased value of to America: 26 *sq.*; British Colonies: 19; China: 50 *sq.*; Egypt: 15, 26; effect of currency depreciation on: 16; cotton yarn surplus exported: 50; expansion of rayon export: 92;

Korea: 58, 150;

Manchuria: 58;

Netherlands East Indies: 10; New Zealand: 356, 361;

Peru: 27;

Turkey: 26;

United States: 8, 86, 298, 348;

See also CURRENCY; STATISTICS.

Extraterritorial Rights, *see* CHINA; JAPAN.

Factory Act, *see* LABOUR.

Famine: 242 and *n.*, 244 *sq.*, 260.

Famine Commission: 242.

Far East: 274.

Fertilizers, *see* CHEMICAL MANUFACTURES.

Finance: 52 and *n.*, 365 *sq.*

China: industrial capital: 194, 203, 216 *sq.*, 224; provided by foreign borrowing: 194, 217

Finance:—*cont.*

- 232, 237, 239; bank loans: 216; public bonds floated: 226 *n.*; Government and private collaboration: 201; Banking system: 215 *sq.*; foreign investment: 203, 222 *sq.*, 230 *sq.*, 253; foreign enterprise: 225, 231, 244;
- Greece: Britain: embargo on gold export: 94; industrial capital: 308, 319; banks reluctant to lend for cotton industry: 327; foreign investment: 311 *sq.*; bank loans: 319; over-capitalization: 319 *sq.*, 324;
- India: diminishing internal purchasing power of: 12; industrial capital: 257; provided by foreign borrowing: 244, 253 *sq.*, 304 *sq.*; establishment of joint-stock banks: 257; Indian investment: 257; bank rates: 258 *and n.*; working capital: 259; 'under-capitalization': 258; 'over-capitalization': 275; Finance Act: 276;
- Japan: gold value of exports: 3; introduction of banks into Japan: 47; control of by Government: 67 *sq.*; Industrial capital: 63, 77, 171, 253, 281, 284; provided by foreign borrowing: 48; values written down: 54; concentration of: 77; Financial policy: 52 *sq.*, 67, 69, 76, 78, 104–11; her budgetary position: 104–8;
- Financial crisis of 1927: 55, 62, 68, 105, 152; embargoes on gold exports: 52, 95, 97, 100, 105; increase of gold reserves: 53; private investment: 68, 109;
- Government expenditure: 68, 105–8, 161, 176, 204; banking policy: 78; control of bank capital: 77; Inukai policy: 111;
- United States: financial crisis of 1929: 62, 157; banking crisis, 1933: 100;
- Taxation: 67, 106, 108, 193, 203 *sq.*, 217, 222, 234 *and n.*, 245, 264, 303, 305, 314.
- See also* CURRENCY; SUBSIDIES.
- Fish: 46, 144, 358.
- Flour: 187, 204, 355.
- Flour mills: 192.
- See also* WHEAT FLOUR.
- Foreign Exchange Control Law: 96.
- Formosa: 135, 137, 147 *sq.*, 150 *sq.*, 175 *sq.*; sugar industry: 176.
- France: 23, 250, 309, 315 *n.*, 332; Colonial policy: 23; Steel production: 294.
- Freight: 203; Cost of: 80, 121, 332, 333 *n.*; Excessive growth of tonnage: 332 *sq.*
- Fuji Boreki: 82.
- Furs: 181.
- Fushun: 137, 141; deposits of oil-shale: 140.
- Gambia: 17.
- Gasoline, *see* OIL.
- Geneva: 205.
- Germany: 8, 59, 65, 137, 143, 249 *sq.*, 283, 309, 315 *n.*, 321, 360; trade with India: 296.
- See also* EXPORTS.
- Glass: 19, 23, 47 *sq.*, 60 *sq.*, 63, 183, 187, 192, 197 *sq.*, 295, 300.
- Gold, *see* CURRENCY.
- Gold Coast: 17.
- Goshi Kabushiki Kaisha: 84.
- Great Britain: 1, 8, 15, 19, 23, 55 *sq.*, 59 *n.*, 61, 65, 71 *sq.*, 79, 82 *sq.*, 94, 96, 100 *sq.*, 121, 126, 137, 143, 183, 249 *sq.*, 265, 283, 301, 327;
- Chinese trade with: 11, 231; investment in Chinese industries: 223;
- Colonial policy: 278, 280, 346 *sq.*, 360; importance as a Dominion market: 359;
- Foreign investment, effects on trade: 312; foreign trade: 310, 321, 325, 347; loss of markets: 344;
- India, trade with: 283, 295 *sq.*, 298; loss of Indian markets: 296; competition: 183, 241, 330;
- Industrial development: 311 *sq.*,

Great Britain:—*cont.*

- 344; effects of Great War: 312 *sq.*, 316, 319, 331, 344, 347; decline in export trade: 313, 316, 343, 348; 'rationalization' and reorganization: 321 *sqq.*, 324, 328, 330 *sq.*, 345; factory development: 308; industrial supremacy challenged: 309 *sq.*; early industrial development: 308 *sq.*; Imperial trade: 348 *sqq.*, 351 *sqq.*, 354-61.
- Japanese trade with: 59, 61, 92; competition: 163, 183, 327, 333 *sq.*, 350 *sq.*, 359 *sqq.*;
- Standard of living: 313, 343;
- Steel production: 294; reorganization of: 330.
- See also* EXPORTS; FINANCE; IMPORTS; LABOUR; UNEMPLOYMENT.
- Great War, *see* WAR.
- Greece: 332.
- Guilds: 72, 241.
- Gunnies, *see* JUTE.
- Hankow: 216, 220.
- Hankow-Canton Railway: 216.
- Hankow and Yangchuen Smelting Works: 220.
- Hangchow-Kiangshan Railway: 200.
- Hawaii: 346.
- 'Hedging': 83 *sq.*
- Hide and skins: 267 *n.*, 269.
- Hokkaido: 146, 148.
- Holland, *see* NETHERLANDS.
- Hong Kong: 60, 192.
- Hong Kong and Shanghai Banking Corporation: 225.
- Hopei: 216.
- Hosiery: 56, 133 *n.*, 160, 192, 197.
- Household articles:
 - Japanese export of: 48.
- I.P.R., *see* PACIFIC RELATIONS CONFERENCE, INSTITUTE OF.
- Imperial Bank: 257 *sq.*, 258 *n.*
- Imperial Department of Industries: 262.
- Imperial Steel Works: 51, 66.
- Imports:
 - Africa: Portuguese: 24; South: 16,

- 356 *sq.*; West: 24; Australia: 16, 22, 348, 350, 353 *sq.*;
- Belgian Congo: 24;
- Canada: 16; China: 6, 10 *sq.*, 181, 183, 185, 190 *sq.*, 202, 218, 221, 231, 350, 358; Crown Colonies: 17 *sq.*, 21, 23;
- Egypt: 15;
- Great Britain: 16, 144, 268, 298, 350 *sqq.*, 359, 361;
- India: 12 *sqq.*, 242, 247, 250, 252, 261, 265, 273 *sq.*, 282 *sq.*, 294, 297 *sq.*; Italian Somaliland: 24;
- Japan: *xxi*, 2, 15, 27, 48, 58 *sq.*, 61, 82, 84, 86, 98, 100, 103, 135 *sq.*, 138, 140, 144, 148 *sq.*, 155, 160, 350 *sq.*, 358;
- Morocco: 23;
- Netherlands East Indies: 8, 9, 23;
- New Zealand: 355;
- Tripoli: 24.
- See also* CURRENCY; MACHINERY; STATISTICS TARIFFS.
- India: *xx sq.*, 1, 8, 15, 21, 27, 51, 58, 60 *sq.*, 71, 85, 136, 176, 183, 192, 221; comparison between Japan and India: 243 *sq.*, 250; decline in British cotton exports to: 326; early contact with the West: 240 *sqq.*, 243, 246; economic crisis of 1921: 250; 1933: 251; establishment of Japanese industry in India: 247;
- Foreign trade: boycott of foreign products: 274, 297; extension of markets: 274; change in distribution: 295; overseas markets: 266, 274, 298, 348; home industries: *xix*, 6, 12, 241; home markets: 250, 294, 306;
- Industrial development: 242 *sq.*, 245, 281, 284, 292, 306; caste a hindrance to: 244; foreign control: 244; foreign investment: 253, 304 *sq.*; foreign technical training: 254, 281; Government industrial policy: 243 *sq.*, 246 *sq.*, 254, 261, 267-72; her 'balanced economy': 294 *sq.*; inferior factory organization: 275 *sq.*, 288; establishment of Department of Commerce and Industry: 261;

India:—*cont.*

- Great War, its effect on trade: 246 *sq.*, 250, 261 *sq.*, 275, 282;
 Japanese competition: 249, 264, 274 *sqq.*, 277 *sqq.*, 299, 327;
 Japan-India trade agreement (1934): 86, 159; causes of Japan's strength: 275 *sq.*, 289 *sq.*;
 Lack of machinery and plant: 247, 275 *sq.*, 281; Managing Agency system: 255 *sq.*, 259;
 Political conditions: 301-4; relations with Great Britain and the Empire: 303 *sq.*; reciprocal trade with Japan: 7, 9, 12 *sq.*, 25, 51, 156, 270, 273, 277, 282, 296, 298;
 Standard of living: 284 *sqq.*, 287 *sq.*, 292, 294 *sq.*, 300, 303, 306;
 Trade with China: 232, 273, 275, 298 *sq.*; with United States: 12, 296.
See also CHINA; COMMERCIAL NEGOTIATIONS; EAST INDIA COMPANY; EXPORTS; JAPAN; TARIFFS; TRADE.
- Indian Banking Inquiry Committee: 259.
 Indian Cotton Inquiry Committee: 266 and *n.*
 Indian External Capital Committee (1925): 254.
 Indian Iron and Steel Company: 281 *n.*
 Indian Peninsula: 246.
 Indian Tariff Amendment Act: 265, 278 *n.*
 Indian Tariff Textile Protection (Amendment) Act: 268 *sq.*, 279.
 Indian Trade Union: 290.
 Indo-China: 46.
 Indo-China, French: 220, 346.
 Indo-Japanese Trade Conventions, *see* COMMERCIAL NEGOTIATIONS.
 Industrial Bank of Japan: 68.
 Industrial Commission: 261 *sq.*
 Industrial Dispute Act: 204.
 Industrial Mission of the Federation of British Industries to the Far East: 168.
 Industrial Revolution: 307 *sq.*, 311, 364; cause of decay of peasant industries: 241 *sq.*

- Industrial Transference Board: 338.
 Inouye, Mr. (Finance Minister, Japan): 69, 104 *sq.*
 Insurance: 222, 253 *n.*, 291, 318;
 Health: 118 *n.*
 Life: 77;
 Unemployment: 118.
 Internal Debt: 108, 110, 164, 216.
 International Affairs, Royal Institute of: 135.
 International Hours Convention, *see* WASHINGTON HOURS CONVENTION.
 International Labour Conference: 288.
 International Labour Office: 102, 205, 289 *n.*
 Inukai Ministry: 111.
 Iraq:
 British oil concession: 141;
 Indian trade with: 274;
 Japanese trade with: 26.
 Iron, *see* METAL MANUFACTURES.
 Iron ore, *see* MINERALS.
 Irrigation: 244.
 Italian Somaliland: 24.
 Italy: 23, 332.
 Japan: xix *sqq.*, 1, 8, 19, 45 *sq.*, 183, 192, 205, 208, 217, 219, 225, 232, 247, 250 *sq.*, 253, 260, 277, 285, 287, 289 and *n.*, 290 *sq.*, 293, 296, 298 *sq.*, 318, 321, 323 *n.*, 331 *sqq.*, 334, 351, 359, 364, 366, 369 *sqq.*;
 Balance of trade: xxi, 16, 352, 356;
 British and Colonial trade: 16 *sqq.*, 23, 28, 349; effect of British Colonial quotas on: 18;
 Chinese trade with: 6 *sq.*, 10, 192, 232;
 Early economic development: feudal system, its effect on trade: 45 *sq.*, 171, 174, 244; the 'Shogunate' days: 45; Dutch trading station: 46; economic revolution (1868): 46; its results: 46 *sq.*; Government author of major enterprises: 47, 49, 64 *sq.*; industries under private management: 47, 66, 73, 76 *sq.*; freedom from foreign control: 50; earthquake disaster (1922): 52, 68; (1923): 105; economic crisis

Japan:—*cont.*

(1920): 52; (1927): 62; (1929): 62, 165;

Foreign trade: a State monopoly: 46; financing of: 47; change in composition of: 47 *sq.*, 156; decrease of European trade: 52; expansion: 156, 246, 356, 359;

Great War, brings new markets and trade increase: 51 *sq.*, 83, 246;

Home consumption: 126, 151, 154; home industries: 126, 154, 158 *n.*, 235;

Imperial policy: 175 *sq.*, 177 *sq.*; trade with her colonies: 154, 172, 175 *sq.*, 176 *n.*, 177, 235; reciprocal trade with Australia: 350, 352, 354, 361;

Industrial development: 3, 5, 6, 9, 12, 19, 51 *sq.*, 57, 114, 133-43, 152, 155 *sq.*, 168, 176, 294; boycott on Indian raw cotton: 277; control by cartels: 55, 70 *sq.*, 75 *sq.*, 90, 172; effect of mechanization of industry: 167 *sq.*; Indo-Japanese iron and steel company established: 60; importance of her Asiatic markets: 7, 51, 79 *sq.*, 346; Japan-India trade agreement: 86;

Inukai Ministry: 111;

Policy regarding overseas factories: 235 *sq.*, 238; extraterritorial rights: 236;

Raw material problem: 133-41, 150 *sq.*, 154 *sq.*, 352; relation between agriculture and industry: 164-8; relationship of State to industry: 65-74, 78, 169 *sq.*, 173, 244; foreign investment: 223, 225;

Russo-Japanese War: its effect on trade: 48 *sq.*, 184;

Sino-Japanese War: 47; its effect on trade: 47 *sq.*, 67;

Standard of living: 79, 101, 112, 116, 144, 147, 149, 154, 164 *sq.*, 173 *sq.*, 177, 355;

Supplies of foodstuffs: 144-8, 151, 154;

Trade with French Colonies: 23; with New Zealand: 356, 361; with

North America: 51, 348; with South Africa: 356 *sq.*

See also CHINA; COMMERCIAL NEGOTIATIONS; COTTON; CURRENCY; EXPORTS; FINANCE; IMPORTS; INDIA; NATIONAL DEBT; NETHERLANDS EAST INDIES; PRODUCTION; SILK; TRADE; WAGES.

Japan and Shanghai Spinning and Weaving Company: 226.

Japan Industrial Club: 117.

Japan Iron Manufacturing Company: 68, 139.

Japan Paper Manufacturers' Association: 76.

Japan Rayon Association: 90.

Japanese Cotton Spinners' Association: 49, 75, 81 *sq.*, 87, 122.

Jewkes, Mr.: 319 *and n.*

Jute: 242, 246, 248, 252 *sq.*, 293, 298 *sq.*;

Jute cloth and gunnies: 246;

Spinning: 243;

Weaving: 243.

Kaip'ing coal-fields: 216, 218.

Kanegafuchi Boseki Kabushiki Kaisha: 82.

Kanegafuchi Cotton Manufacturing Company: 78.

Karafuto: 137, 176 *n.*

Kerosine, *see* OIL.

Korea: 46, 50, 58, 136 *sq.*, 147 *sq.*, 150, 175 *sq.*, 192;

Chinese trade with: 192;

Coal output: 219;

Rice production: 149, 151, 177.

Kwantung: 136, 176 *n.*

Labour:

Cheap labour, India: 249 *n.*, 254, 308 *n.*; child labour: 204 *n.*, 210, 287 *sq.*, 288 *and n.*, 289 *sq.*; comparison of Chinese and Japanese labour: 206; comparison of labour costs in Japan and Lancashire: 122 *sq.*; costs: xx, 21, 79, 86, 98, 101, 111 *sq.*, 114 *sq.*, 117, 119 *sq.*, 121 *sq.*, 155, 163, 167, 202, 275, 284 *sq.*

'Demarcation': 320; depressed areas:

Labour:—*cont.*

337 *sq.*, 340 *sq.*, 343; difficulty of procuring skilled labour: 281 *and n.*; disputes: 129, 281, 327 *sq.*; effect of cheap labour on rayon prices: 91; effect of 1929 depression: 165;
 Factory Acts: 204, 248, 285, 288 *sqq.*; Consolidating Act: 289; factory inspection: 204 *sq.*, 288, 290;
 Female labour: 112 *sq.*, 122, 165, 168, 204 *n.*, 205 *sq.*, 210, 275, 287, 289 *sq.*, 342;
 Hours of labour: 114, 115 *and n.*, 120 *n.*, 122, 124 *sq.*, 127, 158 *n.*, 189, 196 *n.*, 206, 227, 288 *sqq.*, 340, 343;
 Japanese abundance of manual workers: 48, 275; effect on wage: 166, 170; increase of factory hands: 51, 114;
 Labour Union Law: 204;
 'Leave': 286;
 Legislation: 204 *sq.*, 288 *sqq.*, 291; low efficiency as compared to the West: 112, 114, 285, 291 *sq.*;
 Mechanization of factories: 55, 103, 142, 166, 196, 339;
 Need for alternative openings for labour: 131 *sq.*; night work: 204 *n.*, 288;
 Post-war effects: 316 *n.*;
 Recruitment: 116, 172, 209, 243, 260, 285, 286, 337 *sq.*; contract system: 209; double-shift system: 275, 290;
 Strikes: 210, 276; surplus of labour: 317, 324, 338, 342 *sq.*, 345; 'sweating': 127;
 Transference: xix, 171 *sq.*, 318, 337, 340 *sqq.*;
 Turnover: 112 *sq.*, 205 *sq.*, 286, 292;
 Working conditions in India: 288;
See also PRODUCTION; STATISTICS; UNEMPLOYMENT; WAGES.
 Labour disputes, *see* LABOUR.
 Labour Union Law, *see* LABOUR.
 Lancashire: 14, 19 *sqq.*, 22 *sq.*, 79, 82, 85 *sqq.*, 122 *sqq.*, 220, 241, 247, 249, 260, 265 *sq.*, 268, 270 *sq.*

273, 278, 288, 291, 303, 307, 323, 328, 337, 338 *n.*, 340, 342 *sq.*
See also COTTON.
 Lancashire Cotton Corporation: 327 *sq.*
 Latham, Mr.:
 Australian mission to Japan: 353 *sq.*
 League of Nations: 202, 203 *n.*
 Leather: 154, 252, 298.
 Lees-Mody Pact: 278.
 Lignite, *see* MINING INDUSTRY.
 Li-Hung-chang: 187.
 London: 104.
 Lumber: 358.
 Lyons: 23.
 Machinery: 5, 7, 10, 48, 56, 59 *sq.*, 68, 103, 135, 197, 242, 295, 307, 319; growth of Chinese import of: 11, 184, 186, 231; import statistics: 11.
 Madras: 248, 261, 291.
 Malaya: 136, 266, 280; Chinese trade with: 232; Indian trade with: 274, 298; Japanese trade with: 7, 25.
See also BRITISH MALAYA.
 Malta: 17.
 Manchester: 121.
 Manchukuo: 58, 61, 134, 137 *sq.*, 140, 220.
 Manchuria: 7, 10 *sq.*, 57 *sqq.*, 80, 94, 104 *sq.*, 108, 136 *sq.*, 140, 148, 160 *sq.*, 175 *sq.*, 176 *n.*, 177, 185, 213 *n.*, 219, 232 *n.*; Chinese trade with: 192; unsuitable for colonization: 133.
 Matches: 201, 204, 263, 294.
 Maurette, M.: 124 *sq.*
 Mauritius: 17.
 Meat Industry: 361.
 Meiji administration: 78.
 Metal manufacture: 11, 48, 57, 135, 193, 241, 334;
 Iron: 45, 51, 57, 59, 75, 135 *sq.*, 138, 161, 173, 177, 197, 201, 220, 241 *sqq.*, 246, 252, 266 *sqq.*, 270, 280 *sqq.*, 283, 292, 294, 298, 300, 306, 308, 310, 315 *sq.*, 337 *n.*, 339;
 Steel: 7, 45, 51, 57 *sqq.*, 66, 75, 135 *sq.*, 161, 173, 201, 220, 241

Metal manufacture:—*cont.*

sq., 246, 252, 263 *sq.*, 266 *sq.*,
280 *sq.*, 283, 292, 294, 298, 300,
306, 310, 315 *sq.*, 330 *sq.*, 337 *n.*,
339; amalgamation of steel pro-
ducers: 66, 76; Bessemer process:
161, 220, 330; galvanized sheets:
266, 284; National Committee of
the Iron and Steel Industry: 330;
open-hearth furnaces: 161.

Metals: 247, 252;

Aluminium: 135, 139 *sq.*, 193,
201 *n.*, 358;
Antimony: 220;
Lead: 139 *sq.*, 267 *n.*, 358;
Nickel: 358;
Tin: 139 *sq.*, 220;
Zinc: 358.

See also METAL INDUSTRY.

Metal-ware: 181.

Michigan: 222.

Millet: 149.

Minerals: 10, 74, 233, 241;

Asbestos: 295;

Bauxite: 140.

Iron ore: 58, 60, 66, 103, 135 *sq.*,
138, 154, 160, 173, 176, 216,
219 *sq.*, 280, 293;

Limestone: 281.

Magnesite: 281.

Manganese: 184, 220, 281;

Mineral reserves: 219 *sq.*

Tungsten: 184, 201 *n.*, 220.

Mines Act: 289.

Ming Dynasty: 181.

Mining Industry: 253, 316, 322;

Anthracite: 218;

Coal: 77, 135 *sq.*, 138, 140, 143,
154, 160, 172 *sq.*, 177, 216, 246,
280 *sq.*, 292, 294, 298, 308, 310,
337 *n.*, 338 *sq.*; available sup-
plies: 137, 218; Cartel system,
Great Britain: 330; consumption:
137; Indian coal-fields: 243;

Copper: 45 *sq.*, 71, 135, 139; in-
creasing output in Japan: 139;

Lignite: 218.

See also AFRICA; CURRENCY; SOUTH
AMERICA.

Minseito Administration: 78.

Mitsubishi: 54 *n.*, 79 *n.*

Mitsubishi (Iwasaki): 76 *sq.*

Mitsubishi Economic Research Insti-
tute: 7, 88, 122, 168.

Mitsui: 54 *n.*, 76 *sq.*, 79 *n.*

Mitsui Bank: 78.

Mogul Empire: 240.

Mombasa: 80 *n.*

Mongolia: 221.

Montagu-Chelmsford Report: 262.

Morocco, French:

Increase of Japanese imports: 23.

'Most-favoured-nation' clause, *see*
TARIFFS.

Motor-cars: 24, 59, 252, 295 *sq.*, 315.

Motor tyres: 19.

Munitions: 161.

Munitions Board: 261.

Mysore: 290.

Mysore Iron Works: 281 *n.*

Naigai Wata Kaisha: 226.

'Nankeen', *see* COTTON.

Nanking Ministry of Industry: 210.

Nanyo: 176 *n.*

Nasu, Dr.: 134.

National Bureaux: 203.

National Debt:

India: 305;

Japan: 67, 106, 108; progress since
Great War: 109 *sq.*

National Economic Council: 202,
203 *n.*, 221.

National Recovery Administration:
65.

National Shipbuilders Security
Limited: 331.

Naval Construction:

Japan: 108.

Near East:

Japanese trade with: 25 *sq.*

'Near East Trade Promotion Society':
27.

Netherlands: 8, 9, 23, 250, 332.

Netherlands East Indies: 27, 60, 92,
156, 192, 334, 346; Chinese trade
with: 232; Colonial policy of:
8 *sq.*; cost of living: 9; Japanese
trade with: 7 *sq.*, 12, 23, 25, 51,
156.

See also EXPORTS; IMPORTS; TREA-
TIES.

New York: 52, 104.

New Zealand: 353 *sq.*, 358 *sq.*, 361;
British trade with: 348; Japanese
trade with: 355.
Nigeria: 17 *sq.*
Nippon Menkwa Kabushiki Kaisha:
84.
Nisshiu Boseki: 82.
North Borneo:
Japanese oil concessions: 141.
Northumberland: 343.
North Sakhalin:
Japanese oil concessions: 141.
Norway: 332.
Oil: 9 *sq.*, 26; British oil concessions:
141; gasoline: 140; kerosine: 140,
183; legislation, Japanese: 141;
native vegetable oils: 183, 268;
Japanese navy contract for Fushun
oil: 141; oil mills: 187; petroleum:
140, 196.
Oil-seeds: 242.
Oji Paper Manufacturing Company:
76.
'Open Door', *see* TRADE.
Opium: 26, 182.
Ore, *see* MINERALS.
Osaka: 24.
Osaka Asahi: 102.
Osaka Godo Boseki Kabushiki Kaisha:
82.
Ottawa: 16, 278, 283, 297, 360.
Ottawa Agreement, *see* COMMERCIAL
NEGOTIATIONS.
Pacific: 346, 358.
Pacific Relations Conference, Insti-
tute of: 72, 77, 133 *n.*, 135, 209,
222.
Palestine: 21.
Paper: 75 *sq.*, 154, 158, 187, 197, 201,
253, 263, 295, 300, 358.
Peking-Hankow Railway: 216.
Persia:
British oil concessions: 141;
Indian trade with: 274;
Japanese trade with: 26.
Peru: 27.
Petrol: 73.
Petroleum, *see* OIL.
Peuhsihu: 136.
Philippines: 46, 192, 346.

Pig-iron, *see* METAL INDUSTRIES.
Plantation Industries: 246, 248, 253.
Poland: 315 *n.*
Population: xix, 6, 10, 125, 130, 153
sqq., 162, 166, 170 *sq.*, 248, 264 *n.*,
292, 309, 313, 337, 341, 349,
364 *sq.*; agricultural over-popu-
lation: 131 *sqq.*, 273; colonial
population: 150; comparisons of
agricultural labour: 359; effect of
increasing population on imports:
144, 229, 349; housing: 286;
overcrowding: 286 *n.*
See also EMIGRATION; STATISTICS;
UNEMPLOYMENT.
Porcelain: 60 *sq.*, 265.
Pottery: 19, 23, 45, 63, 133 *n.*, 181,
197.
'Preference', *see* TARIFFS.
Prices: 3, 7, 16, 20, 62, 70, 81, 87, 155,
158, 164, 166 *sq.*, 208, 233, 245,
284, 319, 359; decline in world
prices: 139, 320; deflation of
prices: 212, 320; fall in price of
raw materials: 19; India's price
depression: 250, 283, 287; infla-
tion of prices: 319;
Japanese commodity prices, Africa:
24; Japan's price advantage: 16
sq., 21, 28, 48, 56, 79, 81, 86, 112,
159, 162, 169, 279;
Price-cutting: 328, 370; price fluc-
tuations: 83, 96, 99 *sqq.*, 104, 161;
regulation of: xxii, 69, 73, 81,
242, 329 *sq.*; rise in world prices:
52 *and n.*
Stabilization: 67, 107, 323.
See also FINANCE; STATISTICS.
Prince Rupert: 358.
Principal Industries Control Act, *see*
STAPLE INDUSTRIES CONTROL
ACT.
Printing: 210, 358;
Calico printing works: 224 *n.*
Production:
Centralized control of Japanese
cotton: 81, 87; Costs, French and
Japanese comparison of: 24;
'overhead': 99, 120 *sq.*, 123 *sq.*,
139, 141, 163, 170, 322 *sq.*, 369;
Chinese metal production: 219 *sq.*;
cotton: 221, 227; woollen: 221;

Production:—*cont.*

- Colonial production: 154; early British increase: 308;
 - Home production, to reduce imports: 229; Indian mill production expansion: 278;
 - Japanese reduction of costs: xix sq., 2, 79; Japanese steel: 138 sq.; wheat: 148;
 - Limit of output: 69 sq., 73, 330; localization: 260; over-production, steel: 281;
 - Plantation production: 242 sq.;
 - Rationalization: xxii, 68, 114 sq., 119, 196;
 - Ship-building output: 339;
 - Stabilization of rice: 166.
- See also* STATISTICS.
- Protection, *see* TARIFFS.

Quotas, *see* TARIFFS.

- Railways: 194, 230, 239, 243 sq., 253 n., 312;
- China: 184, 200, 217, 238, 245;
- India: 242, 245, 261;
- Japan: 47;
- Manchuria: 57.
- Rayon: 7, 13 sqq., 17 sqq., 21 sqq., 24, 49, 52, 56, 57, 63, 75, 77, 82, 88 sq., 133 n., 134, 154, 156 sq., 160, 192, 201, 269, 277, 315, 334 and n., 369; increase of output: 90, 160; Japan-India trade: 277 sq., 300; Lancashire cotton trade supplanted: 91 sq.
- Rayon-cotton mixtures: 13, 56.
- Religion:
 - Buddhism: 75;
 - Shintoism: 75.
- Reserve Bank: 260 and n., 305.
- Reserve Bank Bill: 260, 302.
- Rice: 101, 107, 164 sq., 173, 177, 185; acreage: 142; colonial production: 149 sqq.; consumption: 144 sqq., 145 n., 146 n., 150 sq., 172, 242, 267 n., 298 sq.; production: 147, 154.
- Ring spindle: 85, 88.
- Roadways, *see* TRANSPORT.
- Rubber: 9, 48, 60 sq., 334.

- Rubber goods: 19, 23 sq., 126, 193, 198, 295, 300.
- 'Rupee Tender System': 254.
- Russia: 60, 148, 184.
- Russo-Japanese War, *see* WAR.
- Safeguarding of Industries Act: 265.
- Satsuma: 49.
- Schuster, Sir George: 270, 294, 305.
- Scotland: 337.
- Scrap-iron: 161, 282 n.; Japanese substitute for pig-iron: 138 and n.
- Seiyukei party: 78, 95.
- Sewing machines: 59.
- Shanghai: 205 sq., 208 sq., 212 sq., 215 sq., 222 sq., 225, 234 n., 273; Capitalization: 224;
- First foreign-owned mills set up: 187.
- Shanghai Cotton Manufacturing Company: 78.
- Shantung: 216.
- Sheep raising: 134.
- Shimonoseki, Treaty of: 186.
- Ship-building: 7, 47 sq., 74, 310, 316, 320, 337 n., 339;
- Depression in British trade: 331 sq.;
- Increase of shipyards in Japan: 331.
- Shipping: 7, 47, 51, 68, 77, 80, 82, 88, 222, 244, 247, 332 sq.
- Effect of reduced export of coal: 333.
- See also* FREIGHT; SUBSIDIES.
- Shogun: 46.
- Siam:
 - Chinese trade with: 192;
 - Japanese trade with: 7.
- Sierra Leone: 17.
- Silk: 4, 7, 22, 54, 75, 85, 98, 107, 162, 164, 182, 201 sq., 202 n., 204 n., 210, 218, 233, 351 and n.;
- China: raw silk trade superseded by Japan: 134, 185;
- Government inspection stations: 169;
- India: 299; increase of Japanese exports to: 300; Italian competition with Japan: 23;
- Japanese decline of exports: 88, 157, 159; trade with United States: 51, 63, 157;
- Piece goods: 89;
- Rationalization of sericulture: 89 sq.;

Silk:—*cont.*

Raw silk: 47 *n.*, 49, 56, 63, 72, 88 *sq.*, 133 *n.*, 134, 156 *sq.*, 173, 299; collapse of American demand for: 6, 25, 89, 156;

Silk-weaving industry: 46, 49, 71, 82; subsidized by Government: 89, 201.

Silver, *see* CURRENCY.

Singapore: 8.

Sino-Japanese War, *see* WAR.

Soap: 265, 295.

Social Problems Research Institute of Tokyo: 188.

South Manchurian Railway Company: 140, 172, 175.

Soya beans: 148, 185 *and n.*

Spices: 298.

Spinners' Association: 54.

Standard of living, *see* Individual Countries.

Staple Industries Control Act: 55, 70 *sqq.*

Statistics:

British foreign investment: 312 *and n.*; British markets: 309;

Chinese banking, table of growth: 215; factory workers, statistics: 210; coal production and consumption, table of: 136; cost of living index: 208;

Cotton mills, table of efficiency: 119 *sq.*, 188, 207; table of comparisons: 223 *sq.*, 224 *n.*; cotton mill industry, India: 249, 272 *sqq.*, 280; cotton mill profits: 325;

Exchange movements table: 95;

Export statistics: 1, 2 *sqq.*, 5, 29 *sqq.*, 36, 42 *sqq.*, 59, 63 *and n.*, 88, 91, 251, 310, 311, 325 *sq.*, 350, 351 *sq.*, 355, 358;

Foreign investment in China: 222;

Imports: 1, 14, 22, 32-35, 37-41, 190, 251, 273 *sq.*, 297, 299, 333, 351, 357, 359 *sq.*;

Indian trade distribution: 296; value of: 247; industrial development, table: 188; industrial value comparisons: 55, 57 *sq.*, 60; insured persons, table: 318, 336, 340;

Japanese budget statistics: 105; in-

dustrial enterprises, table of profits: 7; international payments, table of: 179 *sq.*; population, possible future statistics: 144 *sq.*; post-war development: 51 *sq.*;

Labour statistics: 285, 317;

Manufacturing costs: 98, 119; mechanization statistics: 168; migration of workers: 341 *and n.*; military expenditure: 107;

Organized industries: 248; output of coal-mines: 218 *sq.*;

Piece goods: 190 *sq.*; production costs: 121; "

Quotas: 18;

Rice: production and consumption, table: 146;

Steel production: 282; surplus workers: 338;

Trade changes: 348; volume of: 245 *n.*;

Unemployed: 335, 338;

Wages: 206 *sq.*;

World production, table: 314; increase in: 315 *and n.*

Steel Industries (Protection) Act: 263, 283.

Steel Trade, *see* METAL MANUFACTURES.

Straits Settlements: 18, 58;

Chinese trade with: 192;

Opposition to quota policy: 280 *n.*

Subsidies: 47, 57, 67 *sq.*, 80, 87 *sqq.*, 139, 161, 172 *sq.*, 175 *sq.*, 201, 203, 231, 254, 262 *sqq.*, 283, 332 *sq.*, 333 *n.*;

'Exchange bonus' to Japanese manufacturers: 163;

Valorization schemes: 173.

Suez Canal: 242.

Sugar: 9, 11, 148 *sq.*, 185, 252 *sq.*, 260, 263, 294.

Sumitomo: 54 *n.*, 76 *sq.*

Suzuki firm:

Collapse of: 68 *sq.*, 106.

'Swadeshi' movement: 245, 274.

Ta Chen, Dr.: 206.

Tanganyika: 21.

Tariffs: 250, 252, 359;

Anti-currency depreciation: 16;

Tariffs:—*cont.*

- British preferential treatment: 265
sq., 269 *sq.*, 347;
 Chinese tariff policy: 10, 201 *sq.* and
n., 203, 222, 233; Colonial piece
 goods quota policy: 17 *sqq.*, 25;
 cotton trade protection: 276, 278;
 Dominion* reciprocal preferences:
 360;
 Emergency Import Quota system:
 9;
 French Colonial Tariff system: 23;
 Imperial preference: 264, 267, 269
sq., 272, 303, 347, 360;
 India: tariff development: 12 *sq.*,
 159, 254 *sq.*, 262-71, 276 *sqq.*,
 279 *sq.*, 283 *sq.*, 300; 'fiscal auton-
 omy': 262 and *n.*, 269 *sqq.*, 272,
 279; Fiscal Commission: 262 *sq.*,
 276; 'Revenue' tariff: 260 *sq.*
 and *n.*;
 Japanese tariff development: 49 *sq.*,
 67, 172, 332;
 Lancashire preferential treatment:
 20, 241, 278 *sqq.*;
 'Most-favoured-nation' clause: 13,
 186, 277, 280;
 Quota restrictions: xxii;
 Regulation of cotton textile im-
 ports: 9;
 Steel trade, protection: 139, 173,
 266, 281, 283, 330;
 Tariff Board: 263 *sq.*, 266 *sq.*, 275
sq., 283 *sq.*
See also COMMERCIAL NEGOTIA-
 TIONS; FINANCE.
 Tata hydro-electric companies: 246,
 253.
 Tata Iron and Steel Company: 246,
 253, 281, 283 *sq.*
 Taxation, *see* FINANCE.
 Tea: 23, 47 *n.*, 182, 242, 252, 298 *sq.*
 Textiles: 5, 13, 17 *sq.*, 20, 22, 49, 51,
 55 *sq.*, 57, 74 *sq.*, 78, 81, 83, 85,
 87, 91 *sq.*, 112, 117, 142, 162,
 192, 197, 210, 231, 241, 265, 268,
 278, 287, 290, 300, 310, 322, 324.
See also COTTON; SILK.
 Tientsin: 187, 210, 214, 216, 221, 223,
 234 *n.*
 Timber: 154.
 Tin, *see* METALS.

- Tobacco: 26, 144, 196, 200, 204, 210,
 223, 269.
 Tokyo: 353.
 Tokyo Association for Liberty of
 Trading: 132.
 Tokyo Chamber of Commerce: 58.
 Tokyo Institute of Political and Eco-
 nomic Research: 72, 77, 141 *n.*
 Toyo Boseki Kabushiki Kaisha: 82
 286.
 Toyo Menkwa Company: 78, 84.
 Toyoda Automatic Loom Company:
 78.
 Trade Disputes Act: 291.
 Trade, International:
 Chartered Companies: 182, 240;
 China trade outlet for Western
 factory production: 183; Cotton
 Negotiations (1933): 71;
 Decline in world trade: 332;
 division of markets: xxii, 8, 156;
 specialization in individual coun-
 tries: xxii; drop in world demand
 for raw commodities: 229; 'foreign
 competition': 368;
 India: diminishing internal pur-
 chasing power: 12; Indo-Japan-
 ese agreement (1934), effects of:
 13; her position in world trade:
 250; change of direction: 296;
 cotton trade: international com-
 petition: 300; industrial recovery
 since 1929: 62;
 Japanese abandonment of gold
 standard followed by industrial
 boom: 158;
 Japanese competition: 1 *sqq.*, 11 *sq.*,
 15 *sqq.*, 19 *sqq.*, 24, 27 *sq.*, 81,
 90 *sq.*, 247; in Africa: 23 *sq.*;
 visit of Japanese trade ship to, 24;
 Japanese desire for option on
 world's surplus foodstuffs: 152;
 effects of Great War on trade: 52,
 114, 314;
 Japanese Trade Delegation to Latin
 America: 27; reciprocal trade
 demand: 26; trade combines:
 76, 82-5; speculations in dollars:
 94; in yen: 96;
 'Open Door': 17, 23;
 Post-war change in consumption
 demand: 315 *sq.*;

Trade, International:—*cont.*

Reciprocal trade an advantage:
361 *sq.*

See also COMMERCIAL NEGOTIATIONS; EXPORTS; IMPORTS; INDUSTRIAL REVOLUTION; PRICES; PRODUCTION; TARIFFS; WORLD ECONOMIC DEPRESSION.

Trade Union Act: 291.

Trade Unions:

Britain: 328;

China: 204, 210;

Great Britain: 320 *sq.*;

India: 290 *sq.*

Japan: 129 *sq.*, 171.

Transport: 125, 214, 216 *sq.*, 229, 237, 243, 260, 262, 276, 293;

Coastal and River Services: 216, 253 *n.*, 304 *n.*;

Ocean Transport: 242, 261, 275, 356;

Roadways: construction opens up new districts to trade: 217.

See also RAILWAYS.

Treaty Ports, *see* CHINA.

Tripoli: 24.

Trusts, *see* CARTELS.

Tsing Hua University: 206.

Tsingtao: 216, 223.

Tunis: 23.

'Turco-Japanese Traders' Association': 27.

Turkey:

Japanese trade with: 26.

Typewriters: 24.

Umbrellas: 268, 300.

Unemployment:

China: 196;

Great Britain: xix, 313, 320 *sq.*, 334 *and n.*, 335 *and n.*, 337, 339 *and n.*, 342 *sqq.*;

India: 287;

Japan: 132, 167, 170, 172.

See also INSURANCE.

United States: 8, 12, 25, 52, 59, 65, 72, 75, 85 *sq.*, 96, 101, 111 *sq.*, 137, 142 *sq.*, 148, 220 *sq.*, 225; capture of British exports during Great War: 347; Chinese trade with: 11, 232, 353; Coal output:

219; economic developments: 100; investments in Chinese industries: 223; iron ore production: 135, 219; Japanese trade with: 6 *sq.*, 51, 86 *sq.*, 89, 156, 176, 275; oil deposits: 219; steel production: 294; trade changes: 348; trade with Canada: 358; with India: 296, 298; 'Wheat Loan' to China: 355.

See also EXPORTS; FINANCE.

Upper Yangtse: 214.

Uruguay: 22, 26.

U.S.S.R.: 55, 63, 141.

U.S. Tariff Commission: 53.

Vancouver: 358.

Wages: xx, 79, 91, 119 *and n.*, 156, 163, 169 *sq.*, 206, 210 *sq.*, 276, 292, 320, 328; agricultural standard acts as check on wage rise: 166 *sq.*; alteration in distribution of income: 315; bonuses: 116 *sq.*, 120 *n.*, 123, 207; cost of living: 102, 158, 165, 208 *sq.*, 276; comparison of American and Japanese: 111 *sq.*, 158 *n.*, 165, 320 *n.*, 324, 369; effect of inflation on wage levels: 94, 99, 101 *sq.*; fall in 'direct' wages: 102 *sq.*, 119, 121, 145 *n.*; indirect wage costs: 117 *sq.*, 121 *n.*, 123, 207; payment in kind: 287; standard of wages: 164, 206, 285 *sqq.*; table of wage rates: 119 *n.*, 120 *n.*, 122.

Wales: 337, 340, 343.

War:

Great War: 3, 51, 68, 105, 155, 184, 187, 189, 198, 211, 220, 246, 311 *sqq.*, 331, 334, 344, 347;

Manchurian campaign: 104 *sq.*, 107;

Russo-Japanese War: 48, 184;

Sino-Japanese War: 47, 104, 186.

Washington: 288.

Washington Hours Convention: 125 *and n.*

Water-power: 142 *sq.*, 172.

West Indies: 17, 19, 266, 280;

Indian trade with: 298.

- Wheat: 25, 27, 185, 192, 242, 350, 358;
 Acreage: 147 *sq.*;
 Australian-Japanese trade: 350, 354;
 Consumption: 148;
 Trade with China: 354.
 Wheat-flour: 11, 148.
 Whitley Commission: 288.
 Wireless apparatus: 263.
 Wissalink, Dr.: 87.
 Wood: 45, 181.
 Wood-pulp: 91, 263.
 Wool: 25 *sq.*, 85, 134, 154, 160, 176, 184, 197, 246, 252, 315 *sq.*, 357, 366; Australian-Japanese trade: 350 *sq.*, 354 *sq.*; British depression: 333; Chinese wool-weaving: 221 *sq.*; expansion of industry: 60, 82, 134, 160, 192, 333; New Zealand export: 356; wool weaving, Japan: 47; Japan-South Africa trade: 356 *sq.*
 World Economic Depression: xix, 2, 4, 27, 62, 94, 104, 155 *sq.*, 159, 208, 216, 229, 312, 348.
 Workmen's Compensation Act: 291.
 Yangtse Engineering Works: 220.
 Yangtse River: 219.
 Yangtse Valley: 161.
 Yasuda: 54 *n.*, 76.
 Yokohama earthquake: 105.
 Yokohama Specie Bank, founding of: 47, 52.
 Yunnan: 220.
 Zinc: 139 *sq.*